DOMINION OF CANADA

ANNUAL REPORT

OF THE

DEPARTMENT OF RAILWAYS AND CANALS

FOR THE FISCAL YEAR FROM APRIL 1, 1911, TO MARCH 31, 1912

Submitted in accordance with the provisions of the Revised Statutes of Canada, 1906 Chapter 35, Section 33.

PRINTED BY ORDER OF PARLIAMENT

OTTAWA

PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1912

[No. 20—1913]

To Field Marshal, His Royal Highness Prince ARTHUR WILLIAM PATRICK ALBERT, *Duke of Connaught and of Strathearn, and Earl of Sussex, in the Peerage of the United Kingdom, Prince of the United Kingdom of Great Britain and Ireland, Duke of Saxony, Prince of Saxe-Coburg and Gotha; Knight of the Most Noble Order of the Garter; Knight of the Most Ancient and Most Noble Order of the Thistle; Knight of the Most Illustrious Order of Saint Patrick; one of His Majesty's Most Honourable Privy Council; First and Principal Knight Grand Cross and Great Master of the Most Honourable Order of the Bath; Knight Grand Commander of the Most Exalted Order of the Star of India; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George; Knight Grand Commander of the Most Eminent Order of the Indian Empire; Knight Grand Cross of the Royal Victorian Order; Personal Aide-de-Camp to His Majesty the King; Governor General and Commander-in-Chief of the Dominion of Canada.*

MAY IT PLEASE YOUR ROYAL HIGHNESS,—

The undersigned has the honour to present to Your Royal Highness the Annual Report of the Department of Railways and Canals, of the Dominion of Canada, for the past fiscal year from April 1, 1911 to March 31, 1912.

F. COCHRANE,
Minister of Railways and Canals.

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REPORT

OF THE

DEPUTY MINISTER OF RAILWAYS AND CANALS

FOR THE YEAR ENDED MARCH 31, 1912

To the Honourable F. COCHRANE,
Minister of Railways and Canals.

SIR,—I have the honour to submit the annual report of the Department of Railways and Canals for the fiscal period of twelve months ended March 31, 1912.

The annual reports of the engineers, together with general and special reports from superintendents, both of railways and canals, and from other officers in the department are given in appendices. These include the report of the Government Railways Managing Board; the report of the Government Chief Engineer of the western division of the Transcontinental Railway; the report of the Chairman of the Quebec Bridge Engineers' Board; and the report of the Chief Engineer of the Department.

In Part I, will be found statements of the accountant of the department, showing the amounts expended during the past fiscal year in construction, repair and maintenance of the several works under the department; also statements showing total expenditure on each canal since its construction, and on each of the government railways; also a statement showing payments made, year by year, to subsidized railways, with the aggregates of such payments.

In Part II are the statements of the Departmental Solicitor of the contracts and agreements entered into during the year.

GENERAL SUMMARY.

During the twelve months of the past fiscal year the expenditures made by or through the department on its several works of operation, maintenance and construction, both railway and canal, and in furtherance by subsidy, under specific votes granted by Parliament, of railway enterprises in various parts of Canada other than the government roads, also the revenue derived from these works, aggregate as follows:—

The total railway expenditure amounted to $35,907,972.09, of which $23,712,098.59 was charged to capital, $1,117,070.70 to income, and $11,078,802.80 to revenue.

The railway expenditure on capital account included $1,710,448.56 for the Intercolonial railway, $128,041.91 for the Prince Edward Island railway, $21,110,683.05 for

the eastern division (from Moncton to Winnipeg), of the National Transcontinental railway, which is in course of construction by a board of commissioners, $159,632 for the Hudson Bay railway, and $603,293.07 for the Quebec bridge.

The railway expenditure on income included a total of $859,400.25 paid as subsidies to railways other than the government roads, and $180,997.17 for the Board of Railway Commissioners for Canada.

The expenditure of the Intercolonial railway amounted to $12,301,484 40, namely, $1,710,448.56 on capital account, and on revenue account (working expenses) $10,591,035.84. On the maintenance of the Windsor branch the expenditure was $33,854.05, charged to revenue account.

On the Prince Edward Island railway, the total expenditure was $578,004.82, of which $128,041.91 was charged to capital and $449,962.91 to revenue.

The expenditure on canals aggregated $4,254,609.24; of which $2,560,938.11 was chargeable to capital account, $442,012.43 to income, $676,790.43 for staff, and $574,-868.27 for repairs, the last two amounts being charged to revenue.

Adding to the above for miscellaneous expenditures common to both branches, the sum of $2,922.06, the total expenditure for the year on railways and canals was $40,165,503.39.

The total revenue derived from the government railway and canal works was $11,298,280.31, of which the railways produced $11,034,165.83, and the canals $264,-114.48.* the sum of $201,986.77 being derived from hydraulic and other rents.

The total government expenditure on railways prior to and since Confederation (July 1, 1867) up to March 31, 1912, amounts, on capital account, to $285,126,793.46, including the sum of $25,000,000 granted to the Canadian Pacific Railway Company for its main line, and also the amount, $660,683.09, expended on the Annapolis and Digby railway. In addition, there has been expended from the consolidated fund a total of $226,270,580.19, covering the operating expenses of the government roads, and $43,594,408.57 subsidies to railways other than the main line of the Canadian Pacific railway, making a total expenditure of $511,397,373.65. Of this amount, the sum of $13,881,460.65 was expended prior to Confederation, namely, on the construction of portions of what is now the Intercolonial railway system, $10,766,725.54, and on the construction of the Prince Edward Island railway $3,114,735.11.

The total government expenditure on canals prior to and since July 1, 1867, to March 31, 1912, the close of the fiscal year, amounts on capital account to $101,892,-861.97, of which $20,593,866.13 was expended prior to Confederation, and from the consolidated fund, for operation, maintenance and repairs, to $32,562,218.19, making a total of $134,455,080.16.

The total expenditure on the two branches, railways and canals, up to March 31, 1912, is as above, $645,852,453.81; adding to which, for general expenditures embracing

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* Under the authority of an order in council, dated June 22, 1905, the system of charging tolls for the passage of vessels and goods was abolished on all the canals of the Dominion. Records, however, are kept for statistical purposes, and the compilation of the resultant figures is given in a separate report issued by the department.

both, the further sum of $815,649.90, the grand total expenditure amounts to $646,668,103.71.†

The total revenue collected since July 1, 1867, to March 31, 1912, amounts, from the government railways, to $168,440,753.06, and from the canals to $14,641,607.11, making a total of $183,082,360.17.

Details in tabulated form showing the general classes and directions of the above expenditures and revenues will be found in the statements of the accountant of the department, printed in the appendices, Part I herewith.

GOVERNMENT RAILWAYS IN OPERATION.

The government railways are the Intercolonial, the Windsor branch (maintained only and leased for operation), and the Prince Edward Island railway. They are controlled by a board 'The Government Railways Managing Board,' appointed under authority of an Order in Council, dated April 20, 1909.

Details respecting these railways and their operation will be found in the appendices, Part III, containing reports from the Government Railways Managing Board, and the officials of these roads.

The Intercolonial railway working expenses aggregated $10,591,035.84, and its earnings, $10,593,785.84, the difference between the two amounts showing a profit of $2,750 only.

The Intercolonial, however, actually made a profit of $539,569.69, but at the close of the fiscal year the sum of $536,819.69 was transferred to Equipment Renewal Account, and was available at the beginning of the following year for the purchase of rolling stock. The sum so transferred, though not expended, was charged against 'maintenance of equipment.'

The Windsor branch maintenance expenditure amounted to $33,854.05; the government share of the earnings credited to the branch amounted to $73,176.60, leaving a profit of $39,322.55.

The Prince Edward Island railway working expenses amounted to $449,962.91; its earnings amounted to $367,203.39, the deficit being $82,759.52.

INTERCOLONIAL RAILWAY.

This railway extends from the Atlantic ocean ports of Halifax, St. John, Sydney and North Sydney, to Montreal.

On March 1, 1898, the operatons of the International, the westerly limit of which previously was Levis, opposite Quebec, were extended to Montreal, by means of leases obtained from the Grand Trunk and Drummond County railway companies, making an addition of 169·81 miles to the operation of the government line.

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† This amount does not include the annual payment of $119,700 to the provincial government of Quebec, being interest at the rate of 5 per cent on the sum of $2,394,000 up to 1905, granted by 47 Victoria, Ch. 8 (1884), nor the annual payment of $107,730, being interest at the rate of 4½ per cent since and including 1905, on the said sum of $2,394,000, for the line between Ottawa and Quebec, which sum was transferred to the public debt as a liability, and is dealt with by the Finance Department. (*See* Public Accounts, 1893-4, page 10, and 1906, page 79.)

The leasing agreement for an undivided half share or interest, made with the Grand Trunk Railway Company, and dated February 1, 1898, was confirmed, with modification, by the Act 62-63 Vic., chap. 5, (1899). It covers the distance between Ste. Rosalie station, and the City of Montreal, with termini in that city, also the Jacques Cartier junction, the Chaudiere bridge and its approaches, and the use of the Victoria bridge over the River St. Lawrence above Montreal. Its term extends for a period of ninety-nine years from March 1, 1898, renewable, in like terms of ninety-nine years each, forever; the annual rental being fixed at $140,000.

Under authority of the Act 62-63 Vic., chap. 6 (1899), the Drummond County railway from Chaudiere to Ste. Rosalie, together with the branch from St. Leonard to Nicolet, was acquired by the Dominion; conveyance being made by a deed dated November 7, 1899.

On October 1, 1904, the Canada Eastern railway from Gibson to Loggieville, 123·67 miles, was purchased, and on April 19, 1905, the mortgaged Fredericton and St. Mary's bridge, with connected property, 1·33 mile, was surrendered to the government.

In September, 1911, the branch line, 12·52 miles long, from Ferrona junction to Sunny Brae, was acquired and operated, increasing the length of the railway to 1,468·15 miles. 24·60 miles in the main line and 2·10 miles in branches are double-tracked. There are of spur lines 35·8 miles, and of sidings and tracks in yards, 391·43 miles.

CAPITAL ACCOUNT EXPENDITURE.

The expenditure for the past fiscal year ended March 31, 1912, on capital account amounted to $1,710,448.56, making the total capital expenditure on the whole road as amalgamated under the Act 54-55 Vic., chap. 50 (1891) and 62-63 Vic., chaps. 5 and 6 (1899), together with the acquired Canada Eastern railway, $94,745,819.64.

The principal items charged to capital during the year were as follows (omitting cents); for diversion of line at Chatham and branch to wharf, $210,563; for the new locomotive and car shops with equipment, and new freight yard and cut-off at Moncton, $106,936; addition to general office, Moncton, $80,626; increased accommodation at Halifax, $73,989; docks and wharves at Halifax, $98,898; engine house, machine shops, &c., at Rivière du Loup, $62,347; Sydney Mines diversion, $100,000; increased accommodation at Campbellton, $176,810; increased accommodation at Fredericton, $42,978; at St. John, $25,600; Stellarton, $30,000; Truro, $24,951; and Mulgrave, $28,961; double-tracking at New Glasgow, $26,069; Sydney Mines diversion, $249,929; general protection of highways, $114,266; air brakes to freight cars, $12,160; and rolling stock, $128,485. The sum of $113,406 was expended towards the construction of a railway from the Intercolonial railway near New Glasgow to Guysboro, and from Cross Roads Country Harbour, on the line, to Deepwater: also the sum of $24,696 towards the building of a railway from Dartmouth to Deans Settlement; and the sum of $11,121 towards building a railway from Alba, on the Intercolonial railway, to Baddeck, C.B.

REVENUE ACCOUNT EXPENDITURE.

The expenditures on revenue account are grouped under five main heads, each divided into a number of sub-heads.

The main heads and the expenditures under them for the fiscal year ended March 31, 1912, are as follows: Maintenance of way and structures, $1,820,869.24, against which is a credit of $8,449.66, for maintenance of joint tracks, yards, &c., leaving the net amount $1,812,419.58; maintenance of equipment, $2,681,543.27; traffic expenses, $217,943.10; transportation expenses, $5,728,533.16, against which is a credit of $98,393.97 for operating joint yards and terminals, making the net expenditure under this head, $5,630,139.19; general expenses, $248,990.70.

The aggregate expenditure under these five heads for the year was $10,591,035.84.

199 miles of track were taken up and replaced with new rails at a cost of $158,368.

476,048 ordinary ties, and 190 sets of switch ties were put in track at a cost of $143,054.

151 miles of track were ballasted at a cost of $61,628.

The expenditure on grade crossings, fences, cattle guards was $47,918.

30·55 miles of woven wire fencing were built.

Removal of snow, sand and ice cost $151,580.

On the roadway and track $682,852 was expended, and on the buildings, fixtures and grounds, $265,442.

Details of these expenditures will be found in the statements of the Comptroller, Part III, of the appendices.

The gross earnings of the year, $10,593,785.84, were derived as follows:—

The passenger earnings amounted to $3,017,304.63; the freight earnings were $7,008,300.49; the mail and express earnings were $428,985.64, and the miscellaneous earnings amounted to $139,195.08. The revenue derived from transportation was 98·36 per cent of the gross.

The gross earnings per mile of railway (1,468·15 miles), were $7,215.74; per engine mile, $1.13; per train mile, $1.43; and per car mile 10·19 cents.

The total engine mileage was 9,415,487; the total train mileage, 7,400,975; and the total car mileage, 104,002,011.

The expenses per mile of railway were as follows: Maintenance of way and structures, $1,234.49; maintenance of equipment, $1,826.48; traffic expenses, $148.45; transportation expenses, $3,834.85; and general expenses, $169.59.

The expenses per train mile were: Maintenance of way and structures, 24·49 cents; maintenance of equipment, 36·23 cents; traffic expenses, 2·94 cents; transportation expenses, 76·07 cents; and general expenses, 3·36 cents.

The ratio of expenses to gross earnings was as follows: Maintenance of way and structures, 17·11 per cent; maintenance of equipment, 25·31 per cent; traffic expenses, 2·06 per cent; transportation expenses, 53·15 per cent; and general expenses 2·35 per cent.

Comparing the twelve months ended March 31, 1911, with the corresponding period ended on March 31, 1912, the gross earnings last year showed an increase of $730,002.44. The passenger traffic produced an increase of $117,884.81; the freight traffic an increase of $663,704.83; and the mails, express and miscellaneous, a decrease

of $51,587.20. The increase per mile of railway was $439.44; and per train mile one cent.

GENERAL NOTES *re* INTERCOLONIAL RAILWAY.

The number of passengers carried was 3,416,553, an increase, compared with the previous year, of 183,658. There was an increase of 158,487 in the number of local passengers, and of 25,171 in the number of through passengers.

Of revenue producing freight 4,536,599 tons were carried, an increase, compared with the previous year of 435,199 tons. The local freight was increased by 367,052 tons, and the through freight by 68,147 tons. In addition, supplies were carried for the railway, such as ties, rails, station supplies, &c., to the extent of 153,056 tons, making the total freight carried 4,689,655 tons.

Details as to the principal items will be found in the statements of the Comptroller, Appendix III, and are classified as follows: Products of agriculture, 543,515 tons; of animals, poultry, fish and their products, 81,324 tons; products of mines, 1,479,734 tons; products of forests, 1,011,416 tons; manufactures, 778,614 tons; miscellaneous, 641,996 tons.

The rolling stock equipment will be found described specifically in the report of the mechanical accountant, Appendix Part III. Amongst the purchases were four switching locomotives, bought from capital, and, from revenue, eight passenger locomotives. These eight replaced seventeen small type locomotives, and have a tractive force of 219,950 lbs., an increase of 6,444 lbs. over that of the seventeen. The total number of locomotives is reduced from 397 to 392, but the tractive force is largely increased.

The value of stores on hand at the close of the year was $1,379,710.59, comprising fuel, $190,007.97; roadway and bridge material, $620,978.91; and miscellaneous, $568,723.71.

The following comparative statistics dealing with traffic will be of interest:—

In 1910-11, the average tons of freight carried per train, producing revenue, was 260·21, and the number of passengers 61·41; in 1911-12, the average freight tonnage was 256·69, and passengers 62·36.

In 1910-11, the average tons per loaded car, producing revenue, was 17·23, and the number of passengers, 9·68; in 1911-12, the number of tons was 17·21, and of passengers, 9·46.

The number of tons per train, all freight, in 1910-11, was 265·28, and in 1911-12, 260·66.

The number of tons per car, all freight, in 1910-11, was 17·57, and in 1911-12, 17·47.

The average distance each ton of freight was carried in 1910-11 was 274·47 miles, and in 1911-12 the average distance was 266·23 miles. The average distances passengers were carried in those years were 50·40 miles and 49·20 miles, respectively.

The average number of loaded cars per train in 1910-11 was 15·10 cars of freight and 6·34 cars of passengers; in 1911-12 the number of freight cars per train was 14·92, and of passengers, 6·59.

The average number of empty cars per train in 1910-11 was 2·63, and in 1911-12, 2·48.

In 1910-11 the average of train miles per mile of road was, for freight, 2,971·98, and for passengers, 1,816·56; in 1911-12 these figures were, respectively, 3,204·83 and 1,836.19.

In 1910-11 the average per mile of road of revenue producing freight carried one mile was 773,350·73 tons, and passengers, 111,553·91; in 1911-12 the figures were freight, 822,661·67 tons, and passengers, 114,504·66.

The number of tons, all freight, per mile of road carried one mile in 1910-11 was 788,413·82, and in 1911-12, 835,387·31.

The train mileage in 1910-11 was : passenger, 2,644,241 miles; freight, 4,326,105 miles; in 1911-12, passenger, 2,695,802 miles; freight, 4,705,173 miles.

The loaded car mileage in 1910-11, was 65,317,976 miles, and in 1911-12, 70,193,-524 miles.

The empty car mileage in 1910-11, was 11,367,591 miles, and in 1911-12, 11,667,392 miles.

The caboose car mileage in 1910-11, was 4,048,224 miles, and in 1911-12, 4,379,112 miles.

The steam motor car mileage (passenger) was 5,691 miles in 1910-11. There was no motor car mileage in 1911-12.

The total car mileage of 1910-11 was: Passenger, 16,772,561 miles, and freight, 80,733,791 miles; in 1911-12 the figures were, passenger, 17,761,983, and freight, 86,240,028.

The total freight moved in 1910-11, was: 4,280,954 tons; of this quantity 4,101,-400 tons were revenue producing. In 1911-12, the total freight moved was 4,689,655 tons, of which 4,536,599 tons were revenue producing.

Repairs to passenger cars cost, per car, in 1910-11, $615.06, or percar mile, 1·67 cents; and in 1911-12, $642.63, or per car mile, 1·66 cents.

Repairs to freight cars cost, per car, in 1910-11, $45.26, or per car mile, ·70 of a cent; and in 1911-12, $51.22; or per car mile, ·74 of a cent.

Repairs to locomotives cost, per locomotive, in 1910-11, $1,585.65, or per locomotive mile, 7·40 cents; and in 1911-12, $1,799.20, or per locomotive mile, 7·56 cents.

WINDSOR BRANCH.

The road is 32 miles in length. It extends from Windsor Junction on the Intercolonial railway, to Windsor.

The railway is operated by the Dominion Atlantic Railway Company, formerly the Windsor and Annapolis Railway Company. The company pay all charges in connection with the working of the traffic, two-thirds of the gross earnings being allowed them, the government taking the remaining one-third, and assuming all cost of maintenance of the road and works. This arrangement is carried out under an agreement dated December 13, 1892, which extends for a further term of twenty-one years, arrangements similar to those made in 1871.

All charges for superintendence and supervision of maintenance of work are borne by the government; the duty of supervision is performed by the chief officers of the Intercolonial railway.

The gross government receipts for the twelve months of the fiscal year ended on March 31, 1912, amounted to $73,176.60. The cost of maintenance aggregated $33,-854.05, leaving a profit of $39,322.55. The government share of the receipts showed an increase of $24,985.17 compared with the previous year, which, however, produced $12,462.55 less than the year before it.

PRINCE EDWARD ISLAND RAILWAY.

This is a narrow gauge railway, 3 feet 6 inches. It extends from Tignish to Georgetown, 158·60 miles, and from Charlottetown to Murray Harbour, 52·30 miles, with branches to Souris and Cape Traverse. The length of the road operated was the same as in the previous year, 267·5 miles.

There was an addition of $128,041.91 to the capital account expenditure during the past year ended March 31, 1912, making the total capital expenditure up to that date $8,687,727.38. The added expenditure included $9,217 for increased accommodation at Summerside, $89,413.36 for the branch line from Harmony to Elmira, a distance of 9·9 miles, and for rolling stock, $19,823.11.

REVENUE ACCOUNT.

The gross earnings of the year amounted to $367,203.39, and the working expenses to $449,962.91, making an excess of expenditure over earnings of $82,759.52. Compared with the previous year, there was an increase of $29,783.84 in the gross earnings, and an increase of $25,858.91 in the working expenses.

The expenditure on revenue account (working expenses) is classified, as on the Intercolonial railway, under five heads, with their several sub-heads. It comprises 'Maintenance of way and structures,' $115,416.03; 'maintenance of equipment,' $88,-598.64; 'traffic expenses' $1,107.33; 'transportation expenses,' $229,647.01; 'general expenses', $15,193.90.

The number of passengers carried was 388,076, an increase compared with the previous year of 31,315, producing $153,284.42, an increase of $10,781.01. Of freight, 120,218 tons were carried, an increase of 11,955 tons, producing $176,861.68, an increase of $18,020.07. The earnings for mails and sundries amounted to $37,057.29, an increase of $982.76 compared with the previous year.

The freight carried was—agricultural products, 37,172 tons; animals, poultry and fish and their products, 13,837 tons; products of mines, 15,978 tons; forest products (lumber), 13,111 tons; manufactures, 8,534 tons; miscellaneous commodities, 31,587 tons.

The engine mileage aggregated 433,311 miles, the train mileage 353,116 miles, and the car mileage 2,272,881 miles.

The gross earnings per mile of railway amounted to $1,375.26; per engine mile, 84·74 cents; per train mile, 103·99 cents; and per car mile to 16·16 cents.

The working expenses per mile of railway amounted to $1,685.25, per train mile to 127·43 cents, and per engine mile to 103·84 cents.

The value of stores on hand on March 31, 1912, was $34,925,53, including fuel, $14,215.40, and roadway and bridge material, $14,407.63.

The road and its structures have been efficiently maintained.

Full details will be found in the report of the superintendent and other officials in the appendices hereto, Part III.

GOVERNMENT RAILWAYS PROVIDENT FUND.

The Act of 1907, chap. 22, establishing a fund to be known as 'The Intercolonial and Prince Edward Island Railway Employees' Provident Fund' came into effect on April 1, 1907. The main feature is that a contribution of 1½ per cent of each month's salary and wages is made by each employee to the fund, to which a like amount is added by the railway to the limit of $100,000 a year. Interest at 3 per cent per annum is allowed on the employee's contribution. On retirement, after a certain length of service, the employee will receive for the rest of his life a monthly allowance for each year of his service, equal to 1½ per cent of his average monthly salary or wages for the preceding eight years; the minimum allowance to be $20 a month, and the maximum two-thirds of his said average monthly pay. The fund is administered by a board of five persons, three of whom are officers of the railway, the remaining two being elected annually by the contributing employees. The Act was amended by the Act of 1908, chap. 37, and again by the Act of 1909, chap. 20. Under this last, the Government Railways Managing Board nominates one of its members as chairman of the Provident board.

The fifth annual report of the board, which is printed in the appendices hereto, shows that at the beginning of the fiscal year, April 1, 1911, there was a balance to the credit of the fund of $273,480.01, and that during the past fiscal year the contributions of the railway employees amounted to $81,119.81; adding to this a like contribution from the government railways and the sum of $1,482.08 for refunds, &c., together with interest accrued, $7,280.37, the total of the fund for the year aggregated $444,482.08. The total expenditure during the year was $135,247.37, of which $125,-131.32 was paid out in retiring allowances, and for refunds of 90 per cent of the contributions in cases of death a total of $2.390.20, leaving at the credit of the fund on March 31, 1912, the sum of $309,234.71.

In the course of the year 29 employees were retired and pensioned, and 23 pensioners died.

During the five years that the system has been in operation, the total contributions by employees amount to $380,380.08, and a like sum being added by the railways, the total of the fund is $760,760.16. During this period, 478 employees have been pensioned, of whom 91 have died, leaving 387 in enjoyment of their allowances at the close of the fiscal year 1912. The total paid for retiring allowances is $447,754.53.

HUDSON BAY RAILWAY.

In the annual report for the year 1909-10, the information obtained from a general progress report made under date September 8, 1909, by Mr. John Armstrong, the Chief

Engineer of the railway from The Pas to Hudson Bay, was summarized, his report being printed in the appendices. It dealt with two alternative objective points on the bay, namely, Fort Churchill and Port Nelson.

Since that date much further work has been done in the revision of locations, and under date January 9 and April 19, 1912, Mr. Armstrong has furnished reports showing the progress made up to the end of the fiscal year in establishing practicable routes to either of the two ports mentioned. These reports are printed in the appendices.

From The Pas, for a distance of 250 miles, the route would be common to both, and the revision of the location was completed up to that point, which is a short distance from the Manitou rapids on the Nelson river. Here, approximately, the respective routes to Port Nelson and Fort Churchill diverge. The distance from The Pas on the route as at present located would be 498 miles to Fort Churchill via the east side of Split lake, and 418 miles to Port Nelson. Comparing the two routes, Mr. Armstrong states that the grades, curvatures and cost of construction per mile will, approximately, be the same over both.

Much remained to be considered at the close of the fiscal year before the selection of the Hudson Bay terminus could be decided on. The work of construction for the first 185 miles from The Pas to Thicket Portage was, however, placed under contract in August, 1911, and is in progress. The substructure for the bridge over the River Saskatchewan at The Pas, which had previously been put under contract, was completed in March, 1912, and the superstructure is contracted for. This bridge will consist of four fixed spans, and one swing span, with roadways, one on each side of it, for ordinary traffic.

BOARD OF RAILWAY COMMISSIONERS FOR CANADA.

By the Act 3 Edward VII., chap. 58 (1903), amending and consolidating the law respecting railways, the Railway Committee of the Privy Council was abolished, and in lieu thereof a Board of Commissioners, under the above title, was created, to consist of three members (increased to six by the Act of 1908, chap. 62), to be appointed by the Governor in Council; this Act was brought into force on February 1, 1904, by proclamation, on the authority of an order in council, dated January 18, 1904, which also appointed certain persons as commissioners. By the Act of 1908, chap. 61, the jurisdiction of the board was extended to cover the operation of telegraph and telephone lines, and by the Act of 1908, chap. 62, certain amendments were made to its constitution and otherwise. By the Act of 1909, chap. 31, the board was empowered to determine the maximum price to be charged for electricity developed through water powers leased from the Crown. An Act of 1910, chap. 50, amended certain provisions of the Railway Act regarding the powers of the board, and the Act of the same year, chap. 57, extended the jurisdiction of the board to cover the fixing by it of the tariffs of wireless telegraph and marine electric telegraphs or cables. The Act of 1911, chap. 22, gave powers to the board to require from railway companies the establishment of a staff of fire-rangers, modified the previous enactments regarding the disposal of electricity developed through government leased water powers, and amongst other

enactments, made provision for action, through the board, to ensure the efficient operation of subsidized railways. The office of the board is at Ottawa, though it is authorized to hold sessions in any part of Canada. Its decisions and orders are final, subject to appeal to the Supreme Court upon questions of jurisdiction or law, and also to action thereon by the Governor in Council, in his discretion.

It is required to make, annually, a report of its proceedings, which report is laid before parliament. The report for the year ended March 31, 1912, has been received, and will be laid before parliament in due course.

NATIONAL TRANSCONTINENTAL RAILWAY.

Under an agreement, dated July 29, 1903, ratified by the Dominion Act of that year, chap. 71, and under a modifying agreement dated February 18, 1904, ratified by the Act of that year, chap. 24, the Grand Trunk Pacific Railway Company, a company incorporated by the Act of 1903, chap. 122, have undertaken certain obligations in respect of the construction and operation of a line of railway, wholly upon Canadian territory, between the city of Moncton, in the province of New Brunswick, and the navigable waters of the Pacific ocean. The railway is composed of two divisions, namely, the eastern division, between Moncton and Quebec, thence westerly through the northern part of the provinces of Quebec and Ontario, and, in the province of Manitoba, to the city of Winnipeg, and the western division, between Winnipeg and the Pacific ocean. The eastern division is being constructed by the government under commissioners appointed by the Governor in Council, and on completion is to be leased to and maintained and operated by the company, who undertake to construct, at their own cost and to maintain and operate, the western division. The lease of the eastern division is to be for a period of fifty years, at a rental of three per cent per annum upon the cost of its construction; the first seven years of the term to be free of rent; both divisions are to be equipped by the company, the first equipment to be of a value not less than $20,000,000.

By way of assistance to the company in the construction of the western division, it is provided that the government shall guarantee payment of the principal and interest of an issue of bonds to be made by the company for an amount sufficient to produce a sum equal to 75 per cent of the cost of its construction; this amount is not to exceed $13,000 per mile in respect of the prairie section from Winnipeg to the eastern limit of the Rocky Mountains (such limit to be established by the Chief Engineer of the company and the Chief Engineer of the government, as the result of actual surveys). This limit has been established as the east bank of Wolf creek, a point 120 miles west from Edmonton.

By the Act of 1905, chapter 98, three deeds of trust by way of mortgage, set out in the said Act, were ratified and confirmed, namely, one dated June 10, 1905; between the Grand Trunk Pacific Railway Company, the Royal Trust Company, and His Majesty, to secure the issue of first mortgage bonds; the second dated March 15, 1905, between the Grand Trunk Pacific Railway Company, the National Trust Company, and the Grand Trunk Railway Company, to secure the issue of second mortgage bonds, and the third, also dated March 15, 1905, between the Grand Trunk Pacific Railway

Company, the National Trust Company, and the Grand Trunk Railway Company, to secure the issue of first mortgage bonds in respect of the branch line designated as the 'Lake Superior Branch.'

Payments from the proceeds of the bonds of the company for work done, &c., on the western division, are made from time to time on certificates given by the government Chief Engineer of this division, showing approved expenditures.

By the Act of 1909, chap. 19, authority was given for aiding in the completion of the construction of the 'prairie' section by a loan to the company of $10,000,000, to be secured, as collateral, subject to any prior lien, by a mortgage on the 'prairie' section of their road; such loan to bear interest at the rate of 4 per cent per annum, and to be repayable in ten years.

This loan, which is dealt with by the Finance Department was duly made; the mortgage deed being dated May 22, 1909.

The several government expenditures (on the eastern division) to be made under the above-mentioned Acts and agreements are to be so made from appropriations by parliament for the purpose, and on the recommendation of the Minister of Railways and Canals, to whom accounts of all receipts, expenditures and liabilities are to be furnished monthly.

The Board of Commissioners are required to furnish annually a report to the Governor in Council, through the Minister of Railways and Canals, showing the receipts and expenditures of the year, and other information as to the railway, which report is to be submitted to parliament.

The headquarters of the board are in the city of Ottawa.

By an order in council of January 30, 1912, passed under authority of the Act of 1912, chap. 37, the time for the completion of the Prairie section has been extended to December 1, 1912, and of the Mountain section to May 1, 1914.

By the Act of 1912, chap. 39, the construction of the Eastern division, and its operation, until completed and leased to the Grand Trunk Pacific Railway Company, was placed under the charge and control of one commissioner (in place of four) to be appointed by the Governor in Council, and to hold office during pleasure. By an order in council, dated April 4, 1912, Mr. R. W. Leonard, C.E., the Chairman of the Commission as then existing, was appointed as such commissioner.

The report of the board for the fiscal year ended March 31, 1912, has been prepared, and will be laid before parliament in due course.

The following summary shows the position at the close of the year.

EASTERN DIVISION.

(Moncton to Winnipeg.)

The entire line from Moncton to Winnipeg, 1,804·73 miles, is under contract, being covered by 21 general contracts.

Of this distance, 1,609·94 miles are graded. The track is laid for a distance of 1,427·02 miles of main line, with 275·51 miles of sidings; total 1,702·53 miles, 1,056·31 miles of telegraph have been built. The total percentage of work done is 77·51 per cent under the general contracts, and 79·59 per cent of the bridge superstructures.

The work is divided into six districts; the first being westward from Moncton.

District 'A,' 256·61 miles.—256·25 miles are graded, and the main track is laid for 256·25 miles; also 50·54 miles of sidings; 99·60 per cent of the steel bridges is completed; 253 miles of telegraph have been built. The expenditure for construction during the year was $1,776,024.33. 97·62 per cent of the work has been done.

District 'B,' 578·19 miles.—470·68 miles are graded, and the main track is laid or 457·27 miles; also 48·39 miles of sidings; 94·46 per cent of the steel bridges is completed; 283·5 miles of telegraph have been built. This district extends east and west of the Quebec bridge. The expenditure during the year on construction was $5,589,756.77, and on transport, $16,614.23; 74·74 per cent of the work has been done.

District 'C,' 121·94 miles.—81·60 miles have been graded. 79·52 miles of main track and 11·87 miles of sidings have been laid; 29·76 per cent of the steel bridges is completed; 78 miles of telegraph have been built. The expenditure during the year on construction was $1,339,684.63, and on transport $9,351.82. 41·68 per cent of the work has been done.

District 'D,' 276·11 miles.—271·45 miles have been graded, and 266·43 miles of main track laid; also 52·93 miles of sidings; 95·46 per cent of the steel bridges is completed; 164 miles of telegraph have been built. The expenditure during the year on construction was $4,489,277.45, and on transport, $20,879.89. 70·49 per cent of the work has been done.

District 'E,' 195·19 miles.—158·10 miles have been graded; no track laying has been done. The expenditure during the year on construction was $2,810,468.96, and on transport, $12,599.20; 47·17 per cent of the work has been done.

District 'F,' 376·69 miles.—This brings the road into the city of Winnipeg, on the west side of Water street, the Red river being crossed between St. Boniface and Winnipeg. The double track bridge substructure over the Red river is completed, and the steel superstructure is nearly completed. Out of the total mileage of this district, 371·85 miles have been graded, and 367·54 miles of main track have been laid; also 111·77 miles of sidings; 88·62 per cent of the steel bridges is completed; 277·5 miles of telegraph have been built. The expenditure during the past year on this district amounted, for construction, to $4,802,750.26, and for transport to $7,443.44; 92·55 per cent of the work has been done.

The total expenditure by the Commissioners during the fiscal year ended March 31, 1912, on the entire eastern division amounted to $21,110,993.90, making their total expenditure from the date of their organization in September, 1904, to that date, $116,517,691.51.

Detail summaries of this expenditure are furnished by the Chief Accountant of the Commission. They show that this total is made up as follows: Headquarters, $1,747,988.17; location, $2,943,328.85; construction, $110,609,160.84, and transport, $1,217,213.65.

In the above résumé, it must be understood that the figures showing the work done apply to work executed under the 'general specifications.'

The statement of the Accountant of the department (Part I, of the appendices hereto) shows the expenditure on the eastern division for the year ended March 31,

1912, to be $21,110,683.05, and the total expenditure on this division up to that date $116,533,768.53, the expenditures yearly being as follows:—

1904	$ 6,249 40
1905	778,491 28
1906	1,841,269 95
1907	5,537,867 50
1908	18,910,449 41
1909	24,892,422 68
1910	19,968,126 86
1911	23,488,208 40
1912	21,110,683 05
Total	$116,533,768 53

WESTERN DIVISION.

The Western division extends from the western boundary of the Winnipeg terminals on the east bank of the River Assiniboine, in the city of Winnipeg, to the newly founded city of Prince Rupert, on the Pacific coast, a distance of 1,745 miles.

It is divided into two sections, namely, the 'Prairie Section,' extending from Winnipeg to the east bank of Wolf Creek—a point 120 miles west of Edmonton, the capital of the province of Alberta—a distance of 915 miles, and the 'Mountain Section,' which extends from the east bank of Wolf Creek to Prince Rupert, a distance of 830 miles.

This division is in course of construction by the Grand Trunk Pacific Railway Company, under the government guarantee agreements above mentioned, and the Government Chief Engineer of the Division, on whose certificates payments are made to the company, is Mr. Collingwood Schreiber,. C.M.G., whose report, showing the position of the work at the close of the fiscal year, March 31, 1912, will be found printed in the appendices hereto, Part IV.

Of this, the following is a brief summary:—

'PRAIRIE SECTION.'

Though not yet fully completed, the whole road from Winnipeg to Wolf Creek is in a safe condition for public traffic, and has been regularly operated during the year. Very little work has been done on it beyond some ballasting, and the erection of 58 way stations.

On this section the maximum grade against eastbound traffic is 4/10 of one per cent, and against westbound traffic 5/10 of one per cent.

On this section there are 142 stations, 114 way station houses, 5 divisional station houses, 132 grain elevators, and 44 stock yards, besides numerous other buildings directly connected with the operation of the road.

The total expenditure on this section up to March 31, 1912, aggregates $34,507,-334.29.

'MOUNTAIN SECTION.'

On this section, the track is laid for a distance of 158 miles from Wolf Creek westerly to the first crossing of the River Fraser. From this point to the 180th mile —at Tete Jaune Cache—a large number of men have been employed in the endeavour to complete it so that the track may be laid by June, 1912. From the 180th to the 620th mile, the work of grading is only begun. From the 620th to the 645th mile about 30 per cent of the grading is done. From the 645th to the 668th mile, at the crossing of the River Skeena, the grading is practically completed. From the 668th mile to the 732nd mile, the track is laid, and the road is open for public traffic. The bridge over the Skeena, an important work, involving the building of five piers and two concrete abutments, is not completed. From the 732nd mile to Prince Rupert, the track is laid, and the road is open for public traffic.

The Chief Engineer observes that the progress of work has been greatly hindered by the unsettled state of the labour market.

The total expenditure on this section, up to March 31, 1912, was $33,689,315.76.

The total expenditure on the two sections, up to that date was $68,196,650.05.

SUBSIDIZED RAILWAYS.

Information as to subsidized railways is given in the statements of the accountant and the law clerk of the department, respectively, which will be found in the appendices hereto. The accountant's statements show all payments made, year by year, since the beginning of the system of railway subsidies; the law clerk's statement shows the several subsidy agreements entered into during the past year, with certain details of the specification in each case.

The total payments made on subsidy account during the year ended March 31, 1912, amounted to $859,400.25.

QUEBEC BRIDGE.

On August 29, 1907, the cantilever bridge in course of construction by the Quebec Bridge and Railway Company, (originally commenced under a subsidy of $1,000,000 authorized by the Act of 1899, chapter 7, and a subsidy agreement, dated November 12, 1900) suddenly collapsed.

Under the terms of an agreement with the company, dated October 19, 1903, ratified by the Act of 1903, chapter 54, the government had undertaken to guarantee the principal and interest of the bonds or other securities of the company to the limit of $6,678,200, the company releasing claim to the balance remaining unpaid of the said subsidy, such guarantee to be secured by mortgage on the company's franchises, tolls and property. On February 1, 1904, a mortgage trust deed was executed, conveying to the Royal Trust Company (Montreal) as trustees, all the property and franchises of the company, and providing for the issue of bonds accordingly.

It was provided in this agreement that the government should have the right at any time, on one month's notice, to take over the company's undertaking, assets, property and franchises on paying the shareholders the amount of their stock at par, not

exceeding $265,585.70, with simple interest at 5 per cent and a premium of 10 per cent on the par value of the paid up shares.

Of the said subsidy of $1,000,000, there had been paid to the company a total of $374,353.33 prior to the execution of above agreement; and, subsequent to its execution, payments were made from the proceeds of their bonds to the extent of $5,016,453.66, on certificates of the government engineer covering work done and materials delivered.*

After the collapse of the bridge, the right of the government to take over the company's undertaking was exercised under the authority of an order in council of August 17, 1908. The date of assumption was December 1, 1908. The total of the amounts paid by the government to the several shareholders for their shares was $355,279.07, payment being made to the parties concerned in November, 1908. The deed of assignment and transfer from the company to the government was dated October 18, 1909.

Under authority of an order in council of August 17, 1908, a board of three engineers was constituted for preparation of a new design and specifications, and for the reconstruction of the bridge, with powers to call in expert engineers as advisers on points of difference that might arise.

Towards the close of the year, 1909, such progress had been made that newspaper notice was given in November of that year, inviting contractors to visit the office of the board in order to obtain information to enable them to prepare offers for the superstructure, on the board's plans and specifications; intending contractors being, however, invited to submit alternative designs.

In June, 1910, the formal call for tenders was made by newspaper advertisement. In response, 35 different propositions were submitted, which were duly considered by the board, who, finally, after calling in advisory engineers, recommend the acceptance of an alternative design sent in by the St. Lawrence Bridge Company (with whom are associated the Dominion Bridge Company and the Canadian Bridge Company). This design the board considered to possess certain features of strength, simplification of erection, economical distribution of material, and general appearance which, in their opinion, would produce a bridge that 'would compare most favourably with the highest type of long span bridges in existence.' By an order in council of March 31, 1911, authority was given for entrance into contract with the conjoined companies named, and such contract was executed under date April 4, 1911. The contract price is 9·02 cents a ton, and will aggregate about $8,650,000, a saving of about $2,600,000, having been effected by the elimination of the highways for vehicular traffic contemplated in the original design; the contract date for completion is December 31, 1915.

The bridge when constructed will have a total length of 3,228 feet, or about three-fifths of a mile. The centre span will be 1,800 feet long; the length of the suspended portion of it will be 640 feet. This span will, for a length of 760 feet over the channel of the river, have a height of 150 feet between its lower members and the high water level of the river. The two cantilever arms will each be 580 feet long.

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* The history of the government's connection with the bridge prior to its collapse is given in the Departmental Annual Report of 1907-8, p. XLVII.

The width of the bridge between trusses will be 88 feet. The bridge will comprise a double track railway, and two sidewalks for foot passengers.

Under date of January 10, 1910, a contract for the substructure was entered into with Messrs. M. P. and J. T. Davis, whose tender was the lowest of three obtained after newspaper advertisement calling for tenders; and supplementary agreements (necessitated by changes in the caisson design and in the location of the north anchor pier, were made with them on May 23, 1910, and September 2, 1911.

The Board of Engineers for reconstruction, as originally constituted, has been modified by retirements and is at present composed, as follows:—Charles N. Monsarrat, M. Can. Soc. C.E., chairman and chief engineer; Ralph Modjeski, Am. Soc. C.E., and C. C. Schneider, Can. Soc. C.E., and past president Am. Soc. C.E.

The headquarters of the board are in Montreal.

The report of the board for the year ended on March 31, 1912, will be found printed in the appendices hereto, Part V. It shows that the work of removing, under contract, the debris of the fallen structure has been completed, and the steel has been removed entirely from the bridge site.

The unused steel material provided for the original structure has been disposed of by contract which covers its removal. The work done on the north pier comprised the sinking of caissons to a depth of 81 feet below extreme low water, the concrete foundations and the laying thereon of two courses of granite masonry. On the south main pier all the old masonry was demolished and the caisson placed in position for sinking.

The contractors for the superstructure have been engaged in preparing details of construction and erection, and in building new manufacturing shops. They have also, under the supervision of the board, made tests of typical members for the carrying out of the bridge design.

The expenditure for the past fiscal year up to March 31, 1912, was $603,293.07, and that for the year 1910-11 was $227,563.40, the expenditures of both years being paid out of capital; adding to which, the expenditure from income, namely, for the year 1908-9, $422,867.12 (in which is included the amount $355,279.07, paid for acquiring the stock of the Quebec Bridge and Railway Company, and $31,765.44, the expenses of the commission of inquiry into the causes of the collapse of the old structure), and for the year 1909-10, $111,782.02, for the preparation of plans, &c., the total government expenditure amounts to $1,365,511.61, against which there is to be credited the sum of $100,000 paid in 1910 to the government by the Phœnix Bridge Company, the contractors for the original superstructure, in the final adjustment of claims arising out of the collapse, leaving the net cost to the government up to March 31, 1912, $1,265,511.61. This is irrespective of the amount of subsidy, $374,353.33 paid to the Quebec Bridge Company as above mentioned.

CANALS.

The total expenditure on the Dominion canals for the twelve months ended March 31, 1912, was $4,254,609.24, comprising $2,560,938.11 charged to capital; $442,012.43 charged to income; $676,790.43 for staff and $574,868.27 for repairs; the last two items being charged to revenue.

The balance of rentals due on April 1, 1911, was $140,660.97. The rentals accrued during the year amounted to $240,998.90, making a total of $381,659.87. Of this amount, there was collected during the year a total, after deducting abatements, $5,360.66, of $201,986.77. The balance remaining due on March 31, 1912, was $174,312.44. It should be observed that, as a general rule, rentals are payable in advance, this fact accounting, to a considerable extent, for the large amount of rentals due at the end of each year.

The total revenue collected amounted to $264,114.48, the balance being made up of wharfage dues, fines, &c., and a total of $46,590.72 derived from the operation of the Port Colborne grain elevator on the Welland canal. Of this amount, refunds were made to the extent of $397.73, leaving the net revenue $263,716.75.

No tolls are charged on any of the Dominion canals.

Summaries of these expenditures and receipts will be found in the statements furnished by the Accountant of the department, printed in the appendices, Part I, of the present report.

The above figures relate to the fiscal year 1911-12, but very voluminous statistics relating to canal traffic, and various commercial statistics for the season of navigation of the year 1911, will be found in the 'Canal Statistics,' which are issued as a separate report.

The principal facts of these statistics, summarized, are as follows:—

The total traffic through the several canals of the Dominion for the season of 1911 amounted to 38,030,353 tons, a decrease of 4,960,255 tons compared with the previous year. 304,904 passengers were carried, a decrease of 25,670.

The following features of the principal canal traffic during the season of 1911 will be of interest:—

On the Welland canal, 2,537,629 tons of freight were moved, an increase of 211,339 tons. Of the total, 1,089,605 tons were agricultural products and 250,423 tons produce of the forest; of coal, 619,682 tons were carried; 2,509,731 tons were through freight, of which 1,682,531 tons passed eastward.

Of the through freight, Canadian vessels carried 1,604,322 tons, an increase of 100,846 tons, and United States vessels 905,409 tons, an increase of 127,366 tons.

The total through freight passed eastward and westward through this canal to United States ports was 485,355 tons, a decrease of 144 tons compared with the year 1910.

The quantity of grain passed down the Welland and St. Lawrence canals to Montreal was 836,924 tons, an increase of 47,263 tons as compared with the previous year; no trans-shipments have been made at Ogdensburg since 1903.

On the St. Lawrence canals, 3,105,708 tons were moved, an increase of 344,956 tons, of which 2,146,748 tons were eastbound freight, and 958,960 tons westbound freight; 1,003,090 tons were agricultural products, 977,246 tons coal, and 551,155 tons forest products.

On the Ottawa river canals, the total quantity of freight moved was 320,071 tons, a decrease of 65,190 tons, of which 202,797 tons were produce of the forest.

On the Chambly canal, 599,829 tons were moved, a decrease of 69,470 tons, of which 396,704 tons were produce of the forest, and 118,697 tons of coal.

On the Rideau canal, 172,227 tons were carried, an increase of 37,246 tons; 34,350 tons being produce of the forest, and 13,897 tons of coal.

On the St. Peter's canal, 75,298 tons were carried, a decrease of 10,653 tons; 37,524 tons were coal.

On the Murray canal, 163,457 tons passed, a decrease of 14,484 tons.

On the Trent canal, 57,290 tons were moved, an increase of 11,027 tons, of which 31,342 tons were produce of the forest.

On the St. Andrew's lock on the Red river, Manitoba, the volume of business was 47,135 tons.*

On the Sault Ste. Marie canal the total movement of freight was 30,951,709 tons, being a decrease of 5,443,978 tons. There were 6,502 passages of vessels, the number of lockages being 5,229. Of wheat 80,038,100 bushels, and of other grain 25,104,883 bushels were carried; 2,518,000 barrels of flour; 22,669,789 tons of iron ore; 4,106,953 tons of coal; and 24,729,272 feet, board measure, lumber.

GENERAL OBSERVATIONS.

In view of the report made by the Chief Engineer of the Department on the works under his charge, which, together with the reports of the several officers concerned, will be found in the appendices, it is unnecessary for me, to further summarize its contents. I may, however, state that the surveys for the proposed enlarged Welland canal, which is the most important work the Department has, at present, in contemplation, were completed during the past fiscal year, and the project is in a condition to admit of its consideration by the Department and the Government.

RAILWAY STATISTICS.

The digest of the sworn statements of railway companies relating to their operations in Canada for the twelve months ended June 30, 1912, is prepared by the Departmental Controller of Statistics, and is issued as a separate report.

CANAL STATISTICS.

The traffic statistics of the Dominion canals for the season of navigation of 1912 are compiled under the direction of the same officer, and are also issued as a separate report.

I have the honour to be, sir,

Your obedient servant,

A. W. CAMPBELL,

Deputy Minister.

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* This work, which consists of a lock and dam on the Red river about 15 miles north of Winnipeg, was built and is operated by the Department of Public Works. It affords communication between Winnipeg and Lake Winnipeg. It is only mentioned here for statistical purposes.

APPENDICES

PART I

STATEMENTS

OF THE

ACCOUNTANT OF THE DEPARTMENT

SHOWING

EXPENDITURE ON RAILWAYS AND ON CANALS

(Including Subsidized Railways)

AND RECEIPTS

FOR THE YEAR 1911-12

AND PREVIOUS YEARS

STATEMENT showing the amount expended by the Department of Railways and Canals, Dominion of Canada, during the Fiscal Year ended March 31, 1912.

CANALS.

Name of Work.	Chargeable to Capital.	Chargeable to Income.	Chargeable to Revenue.		Total Expenditure during year.
			Staff.	Repairs.	
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Carillon / Grenville			25,496 59	11,531 20	37,027 79
Chambly	15,469 29	26,838 40	34,796 66	29,508 01	106,612 36
Cornwall	8,037 07	60,352 90	83,784 79	59,338 24	211,513 00
Lachine	312,868 94	56,174 60	87,989 26	111,254 82	568,287 62
Murray		14,390 45	4,213 21	3,344 46	21,948 12
Rideau		4,358 40	54,156 89	85,912 96	144,428 25
Sault Ste. Marie	18,227 10	29,706 21	27,054 50	28,798 51	103,786 32
Soulanges	286,787 88	14,375 47	36,871 50	38,554 54	376,589 39
Ste. Anne's Lock			2,770 51	2,738 40	5,508 91
St. Ours Lock	4,306 28	3,998 58	3,584 10	2,259 46	14,148 42
St. Peters		5,208 18	4,768 20	361 49	10,337 87
Trent	1,746,095 48	97,254 20	44,811 08	50,175 72	1,938,336 48
Welland	159,946 87	28,238 13	149,848 27	105,056 89	443,090 16
Williamsburg	3,200 00	2,030 51	25,753 98	26,875 25	57,859 74
" Rapide Plat		41,934 70			41,934 70
Total	2,554,938 91	384,860 73	585,899 54	555,709 95	4,081,409 13
GENERAL ON CANALS.					
Dredge Vessels—Lachine				4,182,91	4,182 91
" Rideau				12,785 37	12,785 37
Miscellaneous			2,564 90	895 19	3,460 09
C. S. Gratuities to deceased employees (Statutory)		2,206 82			2,206 82
Statistical Officers			36,573 86		36,573 86
Sunday Labour			31,435 55		31,435 55
Survey and Inspections		11,688 60			11,688 60
Quebec Canals: Maintenance (Staff)			20,316 58		20,316 58
Quebec Canals: Purchase of Tug	5,999 20				5,999 20
Quebec Canals: Repairs				1,294 85	1,294 85
Quebec Canals: Dredging		17,374 16			17,374 16
Quebec Canals: Protection walls, Lake St. Francis		7,993 71			7,993 71
Quebec Canals: Macadamizing road Hungry Bay Dyke		17,888 41			17,888 41
Total	5,999 20	57,151 70	90,890 89	19,158 32	173,200 11
Totals	2,560,938 11	442,012 43	676,790 43	574,868 27	4,254,609 24

Grand Total on Canals, $4,254,609.24.

STATEMENT showing the amount expended by the Department of Railways and Canals, &c.—*Concluded.*

RAILWAYS.

Name of Work.	Chargeable to Capital.	Chargeable to Income.	Chargeable to Revenue. Working Expenses.	
RAILWAYS.	$ cts.	$ cts.	$ cts.	$ cts.
Intercolonial	1,710,448 56		10,591,035 84	
National-Transcontinental	21,110,683 05			
Prince Edward Island	128,041 91		449,962 91	
Windsor Branch			33,854 05	
Total	22,949,173 52		11,074,852 80	
GENERAL ON RAILWAYS.				
Quebec Bridge	603,293 07			
Hudson Bay Railway	159,632 00			
Railway Subsidies		859,400 25		
Railway Commission, maintenance, etc.		133,997 17		
Railway Commission Statutory		47,000 00		
Surveys and Inspections		40,470 52		
Governor General's car		13,000 00		
Railway Grade Crossing Fund		7,643 14		
Exchequer Court Awards		8,462 29		
Contribution to McGill University		2,500 00		
Contribution to Polytechnic School, Montreal		2,500 00		
Government Director Grand Trunk Pac. Ry.		2,000 00		
Railway Congress, Brussels		97 33		
Compassionate allowance to the widow of the late John Morton			1,000 00	
Compassionate allowance to the heirs of the late Theodore Raymond			1,000 00	
Compassionate allowance to the mother of the late J. E. McNeill			750 00	
Allowance to John Gunnip			500 00	
Allowance to the father of the late Alex. Seymour			350 00	
Allowance to the father of the late Albert Smith			350 00	
Total	762,925 07	1,117,070 70	3,950 00	
Total on railways	23,712,098 59	1,117,070 70	11,078,802 80	
Grand total on railways, $35,907,972.09				
MISCELLANEOUS EXPENDITURE.				
Cost of litigation		1,810 60		
Unforeseen expenses		1,111 46		
Total		2,922 06		
Grand totals railways and canals, including miscellaneous expenditure	26,273,036 70	1,562,005 19	12,330,461 50	

Total amount of expenditure, $40,165,503.39.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, Ordinary Repairs and Working Staff up to March 31, 1912.

BAIE VERTE CANAL.

	Year ending.	Capital.	Income.
		$ cts.	$ cts.
Government expenditure prior to Confederation			
" since "	1868		
" " "	1869		
" " "	1870		
" " "	1871		17,929 34
" " "	1872		6,399 41
" " "	1873		14,943 83
" " "	1874		4,018 90
" " "	1875		443 00
" " "	1876		110 75
" " "	1877		22 30
" " "	1878		
" " "	1879		
" " "	1880		
" " "	1881		520 00
" " "	1882		
" " "	1883		
" " "	1884		
" " "	1885		
" " "	1886		
" " "	1887		
" " "	1888		
" " "	1889		
" " "	1890		
" " "	1891		
" " "	1892		
" " "	1893		
" " "	1894		
" " "	1895		
" " "	1896		
" " "	1897		
" " "	1898		
" " "	1899		
" " "	1900		
" " "	1901		
" " "	1902		
" " "	1903		
" " "	1904		
" " "	1905		
" " "	1906		
" " "	1907		
" " "	1908		
" " "	1909		
" " "	1910		
" " "	1911		
" " "	1912		
Total			44,387 53

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

BEAUHARNOIS CANAL.

——	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	....	1,611,424 11	....	.....	.....
" since "	1868	....	63,193 75	9,349 99	6,216 98
" " "	1869	....	55 00	9,626 99	6,498 57
" " "	1870	....	27 50	10,117 57	6,384 81
" " "	1871	.....	.....	12,316 53	5,722 36
" " "	1872	.....	27 50	11,792 46	15,733 38
" " "	1873	....	5,122 50	12,210 73	9,882 06
" " "	1874	....	26 00	15,392 51	10,990 56
" " "	1875	.....	36 00	14,399 32	12,253 01
" " "	1876	.....	.....	14,465 86	17,170 83
" " "	1877	.....	.....	14,377 63	15,207 36
" " "	1878	.....	.....	14,383 37	9,861 05
" " "	1879	....	.....	15,015 86	10,370 71
" " "	1880	266 15	.....	15,362 61	8,997 34
" " "	1881	....	.....	17,659 93	10,770 67
" " "	1882	....	.....	18,804 53	20,813 86
" " "	1883	....	6,727 44	18,287 77	15,826 71
" " "	1884	.....	3,277 98	19,107 38	16,232 61
" " "	1885	....	7,999 79	18,960 40	14,637 70
" " "	1886	....	8,491 80	19,228 90	14,356 00
" " "	1887	....	3,633 57	18,867 45	14,999 88
" " "	1888	.....	14,411 97	19,325 05	14,285 98
" " "	1889	.....	10,993 52	20,019 11	14,982 54
" " "	1890	....	....	19,847 42	14,999 20
" " "	1891	.....	17,085 68	18,886 86	12,537 39
" " "	1892	.....	1,696 23	20,050 01	14,999 80
" " "	1893	....	.....	20,348 34	14,107 11
" " "	1894	.....	6,547 72	20,574 53	13,903 46
" " "	1895	.....	27,982 93	20,428 59	12,299 49
" " "	1896	.....	.....	20,725 47	15,050 85
" " "	1897	....	9,813 15	21,012 64	14,862 98
" " "	1898	25,000 00	5,799 34	20,650 00	16,164 92
" " "	1899	....	1,000 00	20,613 32	13,463 01
" " "	1900	....	4,959 22	20,147 59	14,505 30
" " "	1901	.....	483 40	20,118 42	14,199 12
" " "	1902	.....	.....	16,682 52	6,532 33
" " "	1903	....	.....	8,218 14	10,063 38
" " "	1904	....	.....	9,236 27	11,936 37
" " "	1905	.....	14,949 83	9,086 68	10,499 99
" " "	1906	.....	2,531 24	9,291 91	18,640 71
" " "	1907	....	598 64	7,552 02	11,711 09
" " "	1908	.....	2,260 81	7,032 31	13,019 76
" " "	1909	.....	21,758 84	.....	....
" " "	1910	.....	24,319 49	.....	....
" " "	1911	.....	.....	.....	.....
" " "	1912	.....	.....	.....	.....
Total	..	*1,636,690 26	265,810 84	649,574 89	525,691 23†

* *See* page 22 for total cost of St. Lawrence River and Canals.

† This canal being under lease since 1908, no expenditure has been incurred for maintenance nor operation.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August, 1, 1912.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Constructions, Renewals, &c,—*Continued.*

CARILLON AND GRENVILLE CANAL.

—	Year ending	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Imperial Government	....	*	.....	.....	.....
Government expenditure prior to Confederation	.....	63,053 64	.....	.....	.....
" since "	1868	.....	19,817 22	6,301 88	8,911 28
" " "	1869	.....	.....	6,549 38	10,157 42
" " "	1870	.....	4,167 96	6,617 81	9,852 09
" " "	1871	.....	23,119 37	8,676 90	8,218 24
" " "	1872	165,257 28	.....	8,324 51	17,235 31
" " "	1873	133,199 10	3,051 38	10,068 28	8,781 50
" " "	1874	245,258 38	.....	10,710 88	10,605 82
" " "	1875	339,864 76	.....	10,378 57	18,520 44
" " "	1876	326,203 16	.....	10,764 38	11,475 96
" " "	1877	245,738 04	.....	11,050 27	10,304 06
" " "	1878	22,676 20	.....	11,401 30	5,082 72
" " "	1879	243,141 24	.....	11,501 22	7,629 98
" " "	1880	281,514 27	.....	11,959 14	7,625 54
" " "	1881	336,707 53	.....	13,059 18	8,076 91
" " "	1882	433,084 39	.....	14,387 49	7,582 68
" " "	1883	433,575 10	.....	17,479 58	8,310 02
" " "	1884	399,267 16	.....	17,393 91	7,918 42
" " "	1885	157,187 72	.....	19,702 30	10,429 26
" " "	1886	104,973 24	75 00	20,597 82	9,303 31
" " "	1887	20,747 11	.....	20,011 36	19,554 41
" " "	1888	38,996 29	.....	21,531 12	10,036 62
" " "	1889	298 17	.....	22,098 88	10,135 66
" " "	1890	17 58	4,526 61	15,896 16	7,582 38
" " "	1891	.....	4,395 25	21,230 22	10,796 68
" " "	1892	34,585 64	15,036 48	17,458 69	8,620 15
" " "	1893	207 00	42,298 74	16,762 71	10,669 28
" " "	1894	385 55	20,034 94	14,144 98	11,620 09
" " "	1895	.....	5,963 76	15,453 21	12,303 25
" " "	1896	3,850 31	.....	13,995 69	12,161 10
" " "	1897	1,908 44	4,939 20	13,780 29	11,607 95
" " "	1898	82,663 37	5,082 03	11,697 81	10,993 61
" " "	1899	39,999 37	.....	11,919 27	11,478 88
" " "	1900	22,802 27	4,476 50	13,657 06	14,666 71
" " "	1901	4,930 65	9,331 95	13,342 22	13,416 00
" " "	1902	.....	16,998 69	13,725 99	19,366 30
" " "	1903	.....	15,992 52	14,348 17	17,766 28
" " "	1904	.....	9,150 07	16,224 94	17,262 29
" " "	1905	.....	8,715 46	15,858 19	19,977 19
" " "	1906	.....	24,179 33	18,232 71	10,924 72
" " "	1907	.....	9,393 38	16,749 03	7,036 40
" " "	1908	.....	1,387 35	23,019 45	9,775 35
" " "	1909	.....	68,597 35	23,085 54	10,758 01
" " "	1910	.....	10,410 09	23,512 72	11,925 28
" " "	1911	.....	9,051 98	23,608 04	11,303 46
" " "	1912	.....	.....	25,496 59	11,531 20
Total	.....	†4,182,092 96	340,192 61	683,765 84	500,290 21

* Expenditure not given—records relating to same were kept in Ordnance Office at Montreal and were destroyed by fire in 1852.

† Included in total cost of Ottawa River Works, *see* page 17. Cost of enlargement, $4,119,039.32.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

CHAMBLY CANAL.

——	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior	Confederation	634,711 76			
" since	"			8,312 90	9,355 70
" "	"			8,437 22	13,120 97
" "	"			8,934 41	20,180 73
" "	"		2,839 85	10,214 71	22,426 33
" "	"		1,906 40	9,628 50	22,327 99
" "	"		759 00	10,390 44	11,789 27
" "	"		2,810 00	11,675 67	16,427 19
" "	"	2,415 00		12,201 99	16,306 91
" "	"			10,593 14	13,273 56
" "	"	80 00		10,281 78	10,111 32
" "	"			10,413 99	6,022 96
" "	"			11,301 53	8,809 77
" "	"			11,516 22	12,377 74
" "	"			13,950 47	20,705 17
" "	"		31,796 41	16,686 78	16,843 60
" "	"		21,332 36	15,904 38	15,182 24
" "	"		41,640 77	18,448 85	12,003 34
" "	"		21,049 23	18,378 55	13,046 95
" "	"		14,547 27	19,501 28	11,999 77
" "	"		17,911 17	19,053 62	20,071 37
" "	"		65,536 64	20,073 60	11,823 74
" "	"		51,437 87	19,679 22	19,392 18
" "	"		23,221 48	19,655 38	14,399 93
" "	"		43,344 41	19,204 76	11,399 93
" "	"		38,353 99	19,665 22	12,976 48
" "	"		21,127 65	19,310 29	12,451 03
" "	"		8,567 78	19,040 93	11,779 12
" "	"		6,147 63	19,325 49	11,920 74
" "	"		3,694 63	19,349 65	11,801 12
" "	"		12,665 88	18,754 17	13,128 55
" "	"	*150.00	13,184 68	17,992 90	12,466 51
" "	"		15,255 42	18,336 50	11,997 51
" "	"		5,448 88	18,397 58	13,995 00
" "	"		1,195 09	18,529 48	17,572 35
" "	"		19,132 80	18,832 25	17,313 02
" "	"		8,977 43	19,286 10	21,745 65
" "	"		26,701 59	21,544 69	25,656 00
" "	"		33,066 50	26,970 79	19,896 57
" "	"		26,192 72	26,039 53	25,173 48
" "	"		29,953 80	19,916 33	22,508 88
" "	"	157 90	34,264 31	28,375 21	30,627 72
" "	"	13,307 02	35,784 54	28,440 40	24,389 29
" "	"	30,479 41	8,207 00	29,198 76	22,825 53
" "	"	20,000 04	8,717 20	30,548 74	23,950 19
" "	"	15,469 29	26,838 40	34,796 66	29,508 01
Total		†716,470 42	723,610 78	807,091 16	743,081 41

* Less proceeds of sale of piece of land in 1898.

† Chambly Canal and River Richelieu.

Chambly Canal, as above		$ 716,470 42
St. Ours Lock, *see* page 23		121,537 65
		$ 838,008 07
Less amounts deducted at Confederation, *see* Public Accounts, 1868, part I, page 9,		
Government expenditure prior to Confederation.		
Chambly Canal, as above	$ 634,711 76	
St. Ours Lock, *see* page 23	121,537 65	
	$ 756,249 41	
Returned as an asset in Public Accounts, 1868.	433,807 83	
		322,441 58
Agreeing with Public Accounts, 1912, page 4		$ 515,566 49

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

W. C. LITTLE,
Accountant.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

CORNWALL CANAL.

—	Year ending.	Chargeable to Capital.		Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation		1,933,152 69				
Government expenditure since Confederation	1868			2,786 00	11,244 47	3,774 18
" "	1869	10,692 04			10,347 91	3,859 14
" "	1870			17,780 05	10,368 16	7,145 42
" "	1871			7 50	11,848 39	8,891 61
" "	1872			10,000 21	10,594 30	8,163 70
" "	1873			1,011 75	13,042 25	12,467 65
" "	1874				13,405 20	7,610 70
" "	1875	1,780 00			13,351 91	7,097 34
Cost of original construction			1,945,624 73			
Expenditure by Dominion Government	1876				13,320 61	6,423 67
" "	1877	49,211 37			13,375 70	6,440 54
" "	1878	145,015 45			13,825 50	4,935 21
" "	1879	143,092 05			13,817 96	4,983 15
" "	1880	109,454 95			14,440 33	9,735 76
" "	1881	53,948 14			15,173 60	5,524 10
" "	1882	44,587 61			15,052 20	6,634 62
" "	1883	21,728 93			18,283 67	8,361 71
" "	1884	22,018 13			18,475 48	9,007 73
" "	1885	62,034 90		16,298 96	15,988 96	12,368 51
" "	1886	57,820 83		6,960 95	15,994 80	11,832 83
" "	1887	46,966 43			17,520 54	12,100 29
" "	1888	67,945 74			16,938 54	13,942 64
" "	1889	163,993 85			17,890 55	58,205 26
" "	1890	365,038 01		2,000 00	17,063 49	12,758 18
" "	1891	599,001 85		1,459 98	16,077 72	9,830 05
" "	1892	398,555 25		2,345 26	15,596 66	9,864 36
" "	1893	352,536 13			15,173 01	9,668 14
" "	1894	404,990 22			15,344 02	7,733 54
" "	1895	450,689 65		21,497 74	15,414 56	13,053 55
" "	1896	448,408 31		2,175 00	15,472 26	25,259 56
" "	1897	438,487 51			15,540 43	16,438 32
" "	1898	133,208 96			15,011 50	15,431 02
" "	1899	37,649 00		15,960 80	16,000 00	14,623 90
" "	1900	169,889 51		18,547 50	18,798 10	13,998 29
" "	1901	62,032 47			17,104 13	13,166 89
" "	1902	90,535 18			17,896 58	15,045 95
" "	1903	77,833 81			70,129 29	19,205 66
" "	1904	113,795 16		1,730 16	45,792 64	20,932 55
" "	1905	104,093 45		8,324 83	71,073 68	28,100 67
" "	1906	37,879 09		20,063 79	71,246 77	31,893 13
" "	1907	5,218 03		4,191 61	52,050 56	24,489 18
" "	1908	9,897 90		11,270 83	73,651 90	35,708 68
" "	1909	495 00		151,628 65	75,581 54	42,978 72
" "	1910	89 54		35,549 06	76,519 49	51,330 83
" "	1911			76,719 09	78,583 80	45,362 81
" "	1912	8,037 07		60,352 90	83,784 79	59,338 24
Cost of enlargement			5,297,179 48			
Total			7,242,804 21	488,662 62	1,223,207 95	765,717 98

* Included in total cost of St. Lawrence River and Canals, *see* page 22.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

STATEMENT showing the amounts expended on Construction, Renewals &c.—*Continued.*

CULBUTE LOCK AND DAM.

	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure since Confederation.	1868				
" " "	1869				
" " "	1870				
" " "	1871				
" " "	1872				
" " "	1873		835 53		
" " "	1874		38,388 99		
" " "	1875	63,659 29			
" " "	1876	76,842 44			
" " "	1877	56,081 87			
" " "	1878	5,933 53			
" " "	1879	20,694 19			
" " "	1880	16,688 20		202 50	259 31
" " "	1881	4,721 62		962 85	
" " "	1882	29,567 15		790 00	162 33
" " "	1883	14,249 60		695 00	288 99
" " "	1884	8,151 16		733 50	
" " "	1885	19,071 76		730 00	572 75
" " "	1886	26,385 27		730 00	2,396 14
" " "	1887	7,760 88		730 00	967 33
" " "	1888	7,573 99		739 50	730 60
" " "	1889	17,112 01		1,050 00	116 53
" " "	1890	2,818 35		747 83	
" " "	1891	2,183 15	9,122 05	745 25	499 91
" " "	1892		1,546 25	736 00	
" " "	1893		1,420 65	749 00	13 55
" " "	1894		2,540 14	730 00	494 43
" " "	1895		1,475 26	436 05	434 28
" " "	1896				
" " "	1897				
" " "	1898				100 00
" " "	1899				
" " "	1900	3,085 00			
" " "	1901	197 00			
" " "	1902		1,135 00		
" " "	1903				
" " "	1904		2,204 50		
" " "	1905		2,255 00		
" " "	1906				
" " "	1907				
" " "	1908				
" " "	1909				
" " "	1910				
" " "	1911				
" " "	1912				
Total		*382,776 46	60,923 37	11,507 48	7,036 15

* Included in total cost of Ottawa River Works, *see* page 17.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS.
OTTAWA, August 1, 1912.

SESSIONAL PAPER No. 20

STATEMENT showing the amount expended on Construction, Renewals, &c.—*Continued.*

LACHINE CANAL.

——	Year ending.	Capital.		Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Expenditure by Imperial Government	....	40,000 00				
Government expenditure prior to Confederation		2,547,532 85				
Government expenditure since Confederation	1868			1,852 70	13,742 05	10,431 51
" "	1869	2,000 00			14,209 02	12,085 84
Cost of original construction and enlargement from 1845 to 1848			2,589,532 85			
Expenditure by Dominion Government	1870				15,834 49	13,302 39
" "	1871			12,231 40	17,478 52	15,093 25
" "	1872	36,708 15			16,076 93	12,334 69
" "	1873	7,824 28		35,158 21	23,601 03	34,300 60
" "	1874	158,618 35			25,811 07	22,828 66
" "	1875	197,420 52			28,592 01	30,057 34
" "	1876	327,769 39			33,797 73	29,103 65
" "	1877	1,439,375 73			33,148 86	19,824 33
" "	1878	1,484,619 63			39,062 97	13,646 41
" "	1879	958,053 30			42,338 84	12,400 78
" "	1880	369,566 74			38,950 90	10,223 62
" "	1881	292,165 51			39,027 99	19,888 33
" "	1882	252,821 33		2,978 66	41,158 90	17,116 46
" "	1883	396,496 96		1,859 68	45,554 91	18,199 59
" "	1884	188,266 18			48,624 51	19,683 24
" "	1885	111,215 23			49,004 85	20,199 78
" "	1886	210,509 42			50,969 10	19,199 18
" "	1887	28,772 52		12,981 59	53,113 97	22,567 81
" "	1888	19,414 34		7,996 38	52,229 61	19,999 64
" "	1889	76,032 96		972 71	54,110 67	22,957 71
" "	1890	7,448 03		8,238 46	53,114 34	22,999 38
" "	1891	217 53		16,155 75	50,721 69	36,292 98
" "	1892	87,852 35		27,480 80	52,729 37	67,499 62
" "	1893	445,983 21		50,937 40	53,185 00	51,616 79
" "	1894	64,345 14		17,152 48	60,174 03	40,939 70
" "	1895	189,944 36		32,405 20	56,337 44	25,891 45
" "	1896	184,998 25		8,193 15	58,342 96	24,950 20
" "	1897	282,052 48		14,664 21	57,533 20	25,820 73
" "	1898	216,717 44		819 62	57,282 50	33,391 92
" "	1899	162,351 83		3,103 99	55,990 00	35,776 90
" "	1900	125,009 41		12,210 88	56,791 45	31,988 81
" "	1901	97,305 52		12,072 87	58,364 29	50,005 48
" "	1902	113,328 26		36,249 02	59,435 33	45,853 97
" "	1903	58,426 92		109,893 43	69,762 03	53,054 20
" "	1904	181,487 06		162,705 14	77,233 17	50,660 92
" "	1905	112,460 47		144,996 37	86,209 93	65,202 42
" "	1906	103,798 28		133,518 77	84,708 78	60,064 84
" "	1907	18,840 85		65,872 25	53,308 14	47,465 20
" "	1908	203,307 25		92,362 48	74,222 78	70,427 37
" "	1909	359,041 77		143,526 35	72,049 32	82,081 39
" "	1910	215,611 98		70,000 20	77,701 55	75,247 71
" "	1911	253,098 27		73,260 66	72,285 01	91,941 84
" "	1912	312,868 94		56,174 60	87,989 26	111,254 82
			10,352,146 14			
Cost of enlargement	....					
Total			12,941,678 99	1,368,025 41	2,261,910 50	1,615,873 45

Total expenditure on capital account as above		$12,941,678 99
Less charged to St. Lawrence River and Canals, see page 22	$2,950,104 15	
Less expenditure by Imperial Government	40,000 00	
		2,990,104 15
Agreeing with Public Accounts balance sheet 1912, page 4		$ 9,951,574 84

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

W. C. LITTLE,
Accountant.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

LAKE ST. FRANCIS.

——	Year ending.	Capital.	Renewals. Chargeable. to Income.
		$ cts.	$ cts.
Government expenditure since Confederation	1868		
" " " "	1869		
" " " "	1870		
" " " "	1871		
" " " "	1872		
" " " "	1873		
" " " "	1874		
" " " "	1875		
" " " "	1876		
" " " "	1877		
" " " "	1878		
" " " "	1879		
" " " "	1880		
" " " "	1881		
" " " "	1882		
" " " "	1883		
" " " "	1884		
" " " "	1885		
" " " "	1886		
" " " "	1887		
" " " "	1888		
" " " "	1889		
" " " "	1890		
" " " "	1891		
" " " "	1892		
" " " "	1893		
" " " "	1894		
" " " "	1895		
" " " "	1896		
" " " "	1897		
" " " "	1898	3,420 00	
" " " "	1899	23,110 00	2,495 47
" " " "	1900	15,431 46	12,288 39
" " " "	1901	15,000 00	8,060 30
" " " "	1902	13,945 25	
" " " "	1903	5,000 00	
" " " "	1904		2,199 52
" " " "	1905	†	
" " " "	1906	†	
" " " "	1907	†	
" " " "	1908	†	
" " " "	1909	†	
" " " "	1910	†	
" " " "	1911	†	
" " " "	1912	†	
Total		*75,906 71	25,043 68

* Included in total cost of St. Lawrence River and Canals, *see* page 22.
† Transferred to Department of Marine and Fisheries in 1905.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

LAKE ST. LOUIS.

—	Year ending.	Chargeable to Capital.	Chargeable to Revenue.
		$ cts.	$ cts.
Government expenditure prior to Confederation			
" " since "	1868		
" " " "	1869		
" " " "	1870		
" " " "	1871		
" " " "	1872		
" " " "	1873		
" " " "	1874		
" " " "	1875		
" " " "	1876		
" " " "	1877		
" " " "	1878		
" " " "	1879		
" " " "	1880		
" " " "	1881		
" " " "	1882		
" " " "	1883		
" " " "	1884		
" " " "	1885		
" " " "	1886		
" " " "	1887		
" " " "	1888		
" " " "	1889		
" " " "	1890		
" " " "	1891		
" " " "	1892		
" " " "	1893		
" " " "	1894		
" " " "	1895	4,753 14	
" " " "	1896	49,909 31	
" " " "	1897	73,300 41	
" " " "	1898	64,495 83	
" " " "	1899	57,607 79	
" " " "	1900	11,765 70	
" " " "	1901	12,918 31	
" " " "	1902	6,000 00	
" " " "	1903	9,508 72	
" " " "	1904	7,916 90	
" " " "	1905	†	
" " " "	1906	†	
" " " "	1907	†	
" " " "	1908	†	
" " " "	1909	†	
" " " "	1910	†	
" " " "	1911	†	
" " " "	1912	†	
Total		*298,176 11	

* Included in total cost of St. Lawrence River and Canals, *see* page 22.
† Transferred to Department of Marine and Fisheries in 1905.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

STATEMENT showing the amounts expended on Constructions, Renewals, &c.—*Continued.*

MURRAY CANAL.

——	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation					
" since "	1868		400 00		
" " "	1869				
" " "	1870				
" " "	1871				
" " "	1872				
" " "	1873				
" " "	1874				
" " "	1875				
" " "	1876				
" " "	1877				
" " "	1878				
" " "	1879				
" " "	1880				
" " "	1881				
" " "	1882	7,135 63			
" " "	1883	84,071 68			
" " "	1884	118,187 43			
" " "	1885	148,902 66			
" " "	1886	179,704 52			
" " "	1887	142,563 66			
" " "	1888	146,754 37			
" " "	1889	215.326 46			
" " "	1890	106,760 35		494 31	
" " "	1891	61,260 49		5,137 03	173 53
" " "	1892	5,964 22		5,803 48	3,505 15
" " "	1893	30,838 79		5,499 62	5,341 34
" " "	1894			5,667 52	5,295 57
" " "	1895			5,354 97	5,063 49
" " "	1896			5,409 10	5,410 33
" " "	1897			5,526 87	3,966 41
" " "	1898			5,799 94	4,710 23
" " "	1899			5,073 70	3,533 68
" " "	1900			5,613 83	2,777 60
" " "	1901			5,175 74	1,138 15
" " "	1902			5,254 51	6,377 19
" " "	1903	500 00		5,757 00	4,627 70
" " "	1904	750 00	2,521 13	5,291 43	6,075 94
" " "	1905	100 00	740 45	5,346 62	4,452 68
" " "	1906		293 75	5,183 61	2,840 91
" " "	1907		10,423 00	2,788 14	1,710 55
" " "	1908		37,334 70	4,244 42	2,953 23
" " "	1909	126 45	20,250 61	4,720 09	3,374 82
" " "	1910			4,378 74	2,674 57
" " "	1911			3,942 94	2,075 26
" " "	1912		14,390 45	4,213 21	3,344 46
Total	....	*1,248,946 71	86,354 69	111,676 82	81,422 79

* Agreeing with Public Accounts Balance Sheet, 1912, page 4.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

STATEMENT showing the amounts expended on Construction, Renewals, &c.–*Continued.*

OTTAWA RIVER WORKS.

Ste. Anne's Lock, page 21		$ 1,170,215 63
Carillon and Grenville Canal, page 9		4,182,092 96
Culbute Canal, page 12		382,776 46
Rideau Canal, page 18	$ 4,085,889 21	
Less expenditure by Imperial Government	3,911,701 47	
		174,187 74
Total Ottawa River Works (Capital)		$ 5,909,272 79
Add expenditure on slides and booms prior to Confederation	$ 719,247 13	
" " " since "	7,243 60	
" on Chats Canals prior to Confederation	482,950 81	
" in 1881, charged to Miscellaneous, see page 229, part ii, Public Accounts	1,136 84	
Add amount transferred, see page xxxvi, Pub. Accounts Bal. Sheet, 1881	233,555 85	
		1,444,134 23
		$ 7,353,407 02
Less expenditure prior to Confederation, tranferred to Income Account	$ 320,618 28	
" in 1872, on Carillon and Grenville Canal, as shown in Public Accounts Balance Sheet, page xx, under Miscellaneous	165,257 28	
		485,875 56
Agreeing, less outstanding cheques, with Balance Sheet, Public Accounts, 1912, page 4		$ 6,867,531 46

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued*

RIDEAU CANAL.

——	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs
		$ cts.	$ cts	$ cts.	$ cts.
Imperial Government	...	3,911,701 47	.....	....	.. . .
Government expenditure prior to Confed'n	.....	153,062 60	....	....	.....
" since "	1868	166 50	7,298 12	18,397 28	16,475 21
" " "	1869	....	....	19,250 71	13,140 77
" " "	1870	....	13 16	20,022 37	19,469 33
" " "	1871	....	11,732 98	22,814 58	18,120 52
" " "	1872	.....	4,967 50	22,139 48	14,005 32
" " "	1873	. .....	18,070 97	22,841 51	26,074 49
" " "	1874	... .	5,793 16	26,815 44	22,957 40
" " "	1875	9,310 85	.....	26,553 37	19,699 81
" " "	1876	2,163 96	.....	26,430 77	14,428 25
" " "	1877	214 11	....	25,959 56	14,198 18
" " "	1878	....	..... .	26,651 51	11,034 22
" " "	1879	7,703 88	....	26,042 52	7,134 55
" " "	1880	....	....	26,463 88	11,434 05
" " "	1881	... .	133 50	26,024 71	8,627 00
" " "	1882	....	....	26,915 29	13,860 28
" " "	1883	.....	70 65	27 322 81	23,524 84
" " "	1884	....	4,597 50	26,938 95	19,245 02
" " "	1885	.....	2,098 76	26,971 32	18,189 55
" " "	1886	....	550 00	27,045 95	35,648 04
" " "	1887	....	20,823 96	29,440 46	18,565 34
" " "	1888	....	18,889 48	33,458 83	25,478 87
" " "	1889	.....	6,665 22	33,801 77	18,106 36
" " "	1890	....	21,124 10	34,270 57	18,025 21
" " "	1891	.....	20,967 25	34,641 98	21,537 56
" " "	1892	.. ..	31,363 23	35,500 82	21,507 16
" " "	1893	....	24,274 71	35,022 49	18,789 50
" " "	1894	.....	14,485 11	34,943 35	16,939 47
" " "	1895	....	31,559 48	33,827 08	19,897 32
" " "	1896	... .	21,452 29	34,052 77	30,196 38
" " "	1897	....	19,079 11	31,461 55	29,535 94
" " "	1898	....	13,608 39	30,759 05	26,599 93
" " "	1899	... .	700 29	30,751 20	28,199 49
" " "	1900	....	11,780 41	30,623 27	30,237 09
" " "	1901	.....	....	31,334 40	33,791 17
" " "	1902	....	8,894 40	32,193 66	33,959 86
" " "	1903	....	16,235 13	34,595 31	36,424 23
" " "	1904	....	13,525 04	39,127 96	38,496 78
" " "	1905	1,565 84	14,513 35	40,838 81	49,790 55
" " "	1906	. .....	5,272 90	41,819 77	54,495 63
" " "	1907	.....	14,322 03	30,667 34	44,627 82
" " "	1908	. .....	42,903 03	44,875 16	55,090 45
" " "	1909	.....	19,989 52	44,911 60	53,880 51
" " "	1910	.....	9,225 73	48,324 13	95,188 97
" " "	1911	....	6,188 71	47,165 63	79,352 59
" " "	1912	.....	4,358 40	54,156 89	85,912 96
Total	...	*4,085,889 21	467,527 57	1,424,167 86	1,311,893 97

* Included in total cost of Ottawa River Works. *See* page 17

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

SAULT STE. MARIE CANAL.

	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts	$ cts.
Government expenditure since Confederation.	1868				
" " "	1869				
" " "	1870				
" " "	1871				
" " "	1872		949 35		
" " "	1873				
" " "	1874				
" " "	1875				
" " "	1876				
" " "	1877				
" " "	1878				
" " "	1879				
" " "	1880				
" " "	1881				
" " "	1882				
" " "	1883				
" " "	1884				
" " "	1885				
" " "	1886				
" " "	1887				
" " "	1888	8,145 06			
" " "	1889	34,018 95			
" " "	1890	176,568 55			
" " "	1891	325,336 33			
" " "	1892	341,474 31			
" " "	1893	589,801 25			
" " "	1894	1,316,529 29			
" " "	1895	466,151 50		3,432 73	
" " "	1896	189,986 59		16,074 70	2,650 17
" " "	1897	209,561 82		15,381 59	7,671 79
" " "	1898	21,004 56		14,389 92	8,172 09
" " "	1899	63,935 48		13,840 24	6,564 40
" " "	1900	27,157 98		13,901 40	13,219 87
" " "	1901	323,353 93	48 39	13,730 93	10,289 18
" " "	1902	122,505 73		15,920 80	14,839 71
" " "	1903	65,933 43		16,077 22	10,855 70
" " "	1904	32,029 54		14,653 35	9,491 44
" " "	1905	110,181 69		15,681 55	14,776 33
" " "	1906	120,000 00		15,878 11	20,086 15
" " "	1907	95,504 63		12,290 94	11,520 53
" " "	1908	140,433 22		20,345 38	23,206 00
" " "	1909	42,109 63	11,453 28	15,231 79	16,462 29
" " "	1910	46,809 13	147,147 52	18,976 64	20,300 77
" " "	1911	54,797 37	77,066 45	24,951 49	19,355 74
" " "	1912	18,227 10	29,706 21	27,054 50	28,798 51
Total		*4,941,557 07	266,371 20	287,813 28	238,860 67

* Agreeing with Public Accounts, 1912, page 4.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August, 1, 1912.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

SOULANGES CANAL.

——	Year ending.	Capital.	Renewals Chargable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	...	.....	.....	.....	.....
" since. "	1868	.....	.....	.....	.....
" " "	1869	.....	.....	.....	.....
" " "	1870	.....	.....	.....	.....
" " "	1871	.....	.....	.....	.....
" " "	1872	.....	.....	.....	.....
" " "	1873	.....	.....	.....	.....
" " "	1874	.....	.....	.....	.....
" " "	1875	.....	.....	.....	.....
" " "	1876	.....	.....	.....	.....
" " "	1877	.....	.....	.....	.....
" " "	1878	.....	.....	.....	.....
" " "	1879	.....	.....	.....	.....
" " "	1880	.....	.....	.....	.....
" " "	1881	.....	.....	.....	.....
" " "	1882	.....	.....	.....	.....
" " "	1883	.....	.....	.....	.....
" " "	1884	.....	.....	.....	.....
" " "	1885	.....	.....	.....	.....
" " "	1886	.....	.....	.....	.....
" " "	1887	.....	.....	.....	.....
" " "	1888	.....	.....	.....	.....
" " "	1889	.....	.....	.....	.....
" " "	1890	.....	.....	.....	.....
" " "	1891	.....	.....	.....	.....
" " "	1892	54,235 76	.....	.....	.....
" " "	1893	210,336 24	.....	.....	.....
" " "	1894	723,380 95	.....	.....	.....
" " "	1895	752,016 53	.....	.....	.....
" " "	1896	535,939 07	.....	.....	.....
" " "	1897	363,126 06	.....	.....	.....
" " "	1898	1,016,401 00	.....	.....	.....
" " "	1899	1,442,824 22	.....	.....	.....
" " "	1900	693,806 24	.....	6,711 84	5,000 00
" " "	1901	462,626 36	115 00	25,154 78	5,888 77
" " "	1902	235,021 79	.....	22,672 50	2,267 13
" " "	1903	248,929 10	.....	31,987 06	10,362 23
" " "	1904	113,328 45	15,608 69	25,235 25	39,382 01
" " "	1905	34,202 71	30,406 25	25,432 49	21,174 84
" " "	1906	5,000 22	16,033 79	24,817 37	17,096 33
" " "	1907	13,508 88	3,216 29	19,964 04	15,604 71
" " "	1908	50,634 01	4,245 18	28,988 36	35,687 11
" " "	1909	17,795 79	12,363 78	32,324 20	34,802 37
" " "	1910	153,022 23	2,299 93	32,851 69	46,287 16
" " "	1911	102,699 69	3,999 58	32,283 03	37,532 93
" " "	1912	286,787 88	14,375 47	36,871 50	38,554 54
Total.....	.....	*7,515,623 18	102,663 96	345,294 11	309,640 13

* Included in total cost of St. Lawrence River and Canals, *see* page 22.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

STE. ANNE'S LOCK AND CANAL.

	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederat'n	..	134,456 51	.....	778 16	432 47
" since " ..	1868	.....	.....	1,062 96	1,873 51
" " " ..	1869	.....	.....	1,136 54	1,280 36
" " " ..	1870	.....	.....	1,285 84	1,539 02
" " " ..	1871	.....	.....	1,106 80	1,393 63
" " " ..	1872	.....	1,939 46	2,199 64	1,264 40
" " " ..	1873	.....	540 11	2,614 90	7,208 63
" " " ..	1874	12,753 27	.....	1,859 20	4,506 68
" " "	1875	32,627 71	.....	1,952 14	4,033 72
" " " ..	1876	24,935 85	.....	1,982 65	1,756 93
" " " ..	1877	30,003 08	.....	2,057 32	541 95
" " " .	1878	14,618 85	.....	2,202 03	3,259 70
" " " ..	1879	22,113 02	.....	2,152 57	1,704 71
" " " ..	1880	3,054 68	.....	2,553 02	3,257 92
" " " ..	1881	69,042 76	.....	2,611 30	2,343 99
" " " ..	1882	193,158 36	.....	2,569 86	3,448 83
" " " ..	1883	172,959 95	.....	2,775 32	2,725 49
" " " ..	1884	142,006 25	.....	2,618 60	4,042 04
" " " ..	1885	93,679 57	.....	2,611 90	5,803 01
" " " ..	1886	129,681 67	.....	2,537 41	1,499 96
" " " ..	1887	45,276 08	6,054 10	2,505 61	1,380 75
" " " ..	1888	18,910 55	1,372 59	2,569 22	1,730 79
" " " ..	1889	24,786 33	.....	2,571 04	1,525 51
" " " ..	1890	6,151 14	.....	2,505 69	1,503 56
" " " ..	1891	.....	8,173 69	2,571 28	1,666 21
" " " ..	1892	.....	25,471 61	2,581 08	2,800 03
" " " ..	1893	.....	6,521 88	2,640 00	2,799 63
" " " ..	1894	.....	3,497 56	2,508 14	3,025 91
" " " ..	1895	.....	3,694 33	2,495 54	4,993 89
" " " ..	1896	.....	.....	2,357 51	1,688 12
" " " ..	1897	.....	.....	1,904 10	1,699 44
" " " ..	1898	.....	.....	1,920 12	1,997 96
" " " ..	1899	.....	.....	1,840 51	2,679 21
" " " ..	1900	.....	.....	1,895 89	3,999 02
" " " ..	1901	.....	.....	1,994 52	3,015 97
" " " ..	1902	.....	.....	2,072 17	4,684 42
" " " ..	1903	.....	1,984 39	2,292 94	2,244 13
" " " ..	1904	.....	.....	2,151 01	6,091 44
" " " ..	1905	.....	.....	2,259 16	2,294 86
" " " ..	1906	.....	.....	1,595 62	901 47
" " " ..	1907	.....	2,449 96	2,248 29	1,693 63
" " " ..	1908	.....	2,501 42	2,292 19	4,290 57
" " " ..	1909	.....	199 67	2,267 60	2,446 28
" " " ..	1910	.....	2,339 76	2,315 34	2,628 91
" " " ..	1911	.....	2,880 93	2,770 51	2,738 40
" " " ..	1912	.....	.....		
Total.....	....	*1,170,215 63	69,621 46	97,793 24	120,437 06

* Included in total cost of Ottawa River Works, *see* page 17.

Original Construction	$ 134,456 51
Enlargement, including new lock	1,035,759 12
	$ 1,170,215 63

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

ST. LAWRENCE RIVER AND CANALS, SURVEYS, &c.

	Year ending.	Chargeable to Capital.				Chargeable to Income.
		North Channel.	River Reaches.	Galops Channel.	Total.	
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation					18,442 85	98,378 46
Government expenditure since Confederation	1868					
" "	1869					
" "	1870					
" "	1871					
" "	1872					
" "	1873				33,241 69	
" "	1874				26,541 30	
" "	1875				20,611 36	
" "	1876				50,215 47	
" "	1877				47,377 31	
" "	1878				5,570 46	
" "	1879				9,265 77	
" "	1880				9,214 56	
" "	1881				6,927 96	
" "	1882		6,933 45	22,000 00	28,933 45	
" "	1883		3,574 31	41,300 00	44,874 31	
" "	1884		15,546 03	74,300 00	89,846 03	
" "	1885		13,710 17	101,400 00	115,110 17	
" "	1886		16,251 73	99,800 00	116,051 73	
" "	1887		20,037 31	54,400 00	74,437 31	
" "	1888		16,082 85	40,400 00	56,482 85	
" "	1889		1,293 92	17,200 00	18,493 92	
" "	1890		18,279 91	5,700 00	23,979 91	
" "	1891		35,137 25		35,137 25	
" "	1892		59,779 31		59,779 31	
" "	1893		52,643 39		52,643 39	
" "	1894		13,721 66		13,721 66	
" "	1895		1,223 72	181,552 03	182,775 75	
" "	1896		7,457 05		7,457 05	
" "	1897		12,347 31		12,347 31	
" "	1898	171,336 65	7,491 11	32,710 00	211,537 76	
" "	1899	461,979 50	9,366 47	42,430 00	513,775 97	
" "	1900	225,000 00	72,484 41	50,000 00	347,484 41	
" "	1901	184,790 34	19,389 75	91,211 97	295,392 06	
" "	1902	125,000 00	29,268 64	24,037 85	178,306 49	
" "	1903	126,833 94	16,432 28	25,000 00	168,266 22	
" "	1904	68,595 42	9,634 66	6,450 00	84,680 08	
" "	1905	93,025 89	25,743 51	49,734 70	168,504 10	
" "	1906	83,028 98		26,506 26	109,535 24	
" "	1907	61,528 34		13,350 00	74,878 34	
" "	1908	40,500 00		12,976 77	53,476 77	
" "	1909	42,770 45		25,378 21	68,148 66	
" "	1910	34,389 32		2,057 86	36 447 18	13,694 97
" "	1911					16,224 68
" "	1912					
Total		1,718,778 83	483,830 20	1,039,895 65	3,469,913 41*	128,298 11

* In this total is included an expenditure on capital account of $227,403.73 on the St. Lawrence River and Canals for the period previous to 1882.

ST. LAWRENCE RIVER AND CANALS, SURVEYS, &c.

St. Lawrence River and Canals, as above			$ 3,469,913 41
Beauharnois Canal, *see* page	8		1,636,690 26
Cornwall Canal	" 11		7,242,804 21
Williamsburg Canal	" 28 and 29		10,488,811 69
Lake St. Louis	" 15		298,176 11
Soulanges Canal	" 20.		7,515,623 18
Lachine Canal, from prior to Confederation to June 30, 1875, *see* page		13	2,950,104 15
Lake St. Francis, *see* page		14	75,906 71
Agreeing with Public Accounts balance, 1912, page		4	$ 33,678,029 72

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

W. C. LITTLE,
Accountant.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c. —*Continued.*

ST. OURS LOCK.

	Year ending	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	....	121,537 65	.....	.....	.....
" since "	1868	.....	.....	1,532 75	753 74
" " "	1869	.....	.....	1,755 15	1,399 18
" " "	1870	.....	.....	1,458 09	1,006 22
" " "	1871	.....	.....	1,414 48	1,210 98
" " "	1872	.....	.....	1,565 80	1 263 19
" " "	1873	.....	.....	2,076 50	1,575 10
" " "	1874	.....	.....	2,219 13	2,363 42
" " "	1875	.....	.....	1,362 22	1,245 69
" " "	1876	.....	.....	1,403 92	1,601 71
" " "	1877	.....	.....	1,533 40	750 80
" " "	1878	.....	.....	1,556 65	283 77
" " "	1879	.....	.....	1,581 55	456 07
" " "	1880	.....	.....	1,614 01	705 54
" " "	1881	.....	.....	1,741 97	1,299 77
" " "	1882	.....	.....	2,002 71	1,902 41
" " "	1883	.....	17,230 32	2,361 65	2,188 08
" " "	1884	.....	5,279 87	2,315 37	1,494 99
" " "	1885	.....	4,700 64	2,271 57	3,652 63
" " "	1886	.....	.....	2,311 70	4,143 47
" " "	1887	.....	.....	2,175 37	5,864 78
" " "	1888	.....	.....	2,216 04	2,801 17
" " "	1889	.....	17,964 45	2,421 14	2,002 63
" " "	1890	.....	24,571 96	2,138 40	1,935 44
" " "	1891	.....	21,696 74	2,011 08	4,460 16
" " "	1892	.....	3,585 34	2,168 44	1,944 33
" " "	1893	.....	.....	2,136 66	1,994 34
" " "	1894	.....	.....	2,216 68	924 55
" " "	1895	.....	.....	2,161 63	915 50
" " "	1896	.....	.....	2,094 91	1,678 49
" " "	1897	.....	.....	2,135 60	707 06
" " "	1898	.....	.....	2,049 67	692 04
" " "	1899	.....	.....	2,244 12	1.494 93
" " "	1900	.....	1,596 88	2,181 43	2,681 10
" " "	1901	.....	3,610 06	2,128 25	1,681 44
" " "	1902	.....	15,549 27	2,262 39	984 36
" " "	1903	.....	9,344 89	2,288 63	1,671 83
" " "	1904	.....	7,984 41	2,334 67	1,690 61
" " "	1905	.....	14,900 90	2,479 66	1,716 35
" " "	1906	.....	7,307 39	2,582 95	3,872 75
" " "	1907	.....	1,200 00	2,064 62	1.142 79
" " "	1908	.....	3,338 79	2,891 76	2,121 43
" " "	1909	.....	.....	2,994 78	3,693 19
" " "	1910	.....	1,925 08	4,137 64	1,752 66
" " "	1911	.....	1,200 23	3,527 69	2,353 81
" " "	1912	4,306 28	3,998 58	3,584 10	2,259 46
Total	...	*125,843 93	169,985 80	97,709 93	84,333 96

* Included in the total cost of Chambly Canal and Richelieu river, *see* page 10.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

STATEMENT showing the amount expended on Construction, Renewals, &c.—*Continued.*

ST. PETER'S CANAL.

—	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	.....	156,523 32	.....	.....	.....
" since " ..	1868	21,519 72	.....	.....	.....
" " " ..	1869	70,719 80	.....	.....	.....
" " " ..	1870	.....	46,193 57	.....	.....
" " " ..	1871	.....	.....	225 36	555 78
" " " ..	1872	.....	.....	280 00	6,122 07
" " " ..	1873	.....	.....	343 32	6,539 58
" " " ..	1874	.....	.....	725 93	1,558 57
" " " ..	1875	20 97	.....	560 00	889 35
" " " ..	1876	11,125 00	.....	641 55	.....
" " " ..	1877	63,330 18	.....	600 00	17 45
" " " ..	1878	26,511 51	.....	600 00	.....
" " " ..	1879	107,337 75	.....	631 50	.....
" " " ..	1880	80,120 54	.....	400 00	.....
" " " ..	1881	69,434 76	.....	959 58	.....
" " " ..	1882	484 00	.....	1,920 54	200 63
" " " ..	1883	.....	.....	2,089 19	232 42
" " " ..	1884	2,471 40	.....	2,601 47	367 85
" " " ..	1885	16,820 15	.....	1,929 11	183 11
" " " ..	1886	2,316 85	.....	2,360 67	297 81
" " " ..	1887	1,087 75	750 00	2,777 13	343 23
" " " ..	1888	.....	.....	3,217 77	1,588 40
" " " ..	1889	.....	500 00	3,085 29	353 38
" " " ..	1890	.....	.....	3,110 15	255 34
" " " ..	1891	972 65	510 53	3,255 30	312 02
" " " ..	1892	14,387 00	30,936 82	3,007 70	1,461 24
" " " ..	1893	811 59	9,987 78	2,938 15	1,856 30
" " "	1894	437 05	3,852 21	2,935 94	1,986 70
" " " ..	1895	868 44	26,222 46	2,499 81	353 55
" " " ..	1896	1,455 21	16,743 64	2,182 04	260 90
" " " ..	1897	.....	.....	2,728 38	1 20
" " " ..	1898	.....	111 70	2,785 25	453 85
" " " ..	1899	.....	.....	2,819 86	456 61
" " " ..	1900	.....	.....	2,833 24	1,483 30
" " " ..	1901	.....	2,311 26	2,730 44	841 63
" " " ..	1902	.....	10,014 43	2,939 81	274 44
" " " ..	1903	.....	.....	2,836 49	764 11
" " " ..	1904	.....	.....	3,126 94	122 45
" " " ..	1905	.....	3,000 10	2.969 90	1,095 90
" " " ..	1906	.....	.....	3,239 19	253 65
" " " ..	1907	.....	.....	2,468 78	246 87
" " " ..	1908	.....	.....	3.371 13	942 64
" " " ..	1909	.....	.....	3,282 22	532 78
" " " ..	1910	.....	.....	3,449 43	238 14
" " " ..	1911	.....	.....	4,180 96	473 44
" " " ..	1912	.....	5,208 18	4,768 20	361 49
		648,755 64	.....	.....	.....
LESS—Refunds in 1897-8.	.....	208 50	.....	.....	.....
Total	....	*648,547 14	156,342 68	96,407 72	34,278 18

* Expenditure as above ..... $ 648,547 14
Less expenditure prior to Confederation 156,523 32

Agreeing with Public Accounts 1912, page 4 ..... $ 492,023 82

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

TAY CANAL.

——	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure since Confederation	1868				
" " "	1869				
" " "	1870				
" " "	1871				
" " "	1872				
" " "	1873				
" " "	1874				
" " "	1875				
" " "	1876				
" " "	1877				
" " "	1878				
" " "	1879				
" " "	1880				
" " "	1881				
" " "	1882		748 65		
" " "	1883	4,831 80			
" " "	1884	50,878 12			
" " "	1885	92,473 97			
" " "	1886	65,561 51			
" " "	1887	49,617 92			
" " "	1888	54,166 57			
" " "	1889	89,486 18			
" " "	1890	22,226 23		*	*
" " "	1891	17,114 78		*	*
" " "	1892	29,771 65		*	*
" " "	1893			*	*
" " "	1894			*	*
" " "	1895			*	*
" " "	1896			*	*
" " "	1897	10,720 50		*	*
" " "	1898			*	*
" " "	1899			*	*
" " "	1900	2,750 00		*	*
" " "	1901			*	*
" " "	1902			*	*
" " "	1903			*	*
" " "	1904			*	*
" " "	1905			*	*
" " "	1906			*	*
" " "	1907			*	*
" " "	1908			*	*
" " "	1909			*	*
" " "	1910			*	*
" " "	1911			*	*
" " "	1912			*	*
Total		†489,599 23	748 65	*	*

* Included in Rideau Canal since 1890.
† Agreeing with Public Accounts 1912, page 4.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

TRENT CANAL.

——	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	..	309,371 31	.....	.....	.....
" since "	1868	.....	.....	.....	.....
" " "	1869	.....	.....	.....	.....
" " "	1870	.....	.....	.....	.....
" " "	1871	.....	.....	.....	.....
" " "	1872	.....	.....	.....	.....
" " "	1873	.....	.....	.....	.....
" " "	1874	.....	.....	.....	.....
" " "	1875	.....	.....	.....	.....
" " "	1876	.....	.....	.....	.....
" " "	1877	.....	.....	.....	.....
" " "	1878	.....	.....	.....	.....
" " "	1879	.....	.....	.....	.....
" " "	1880	561 50	.....	1,188 92	3,568 89
" " "	1881	.....	.....	2,489 93	2,233 50
" " "	1882	.....	5,836 51	2,011 92	8,115 50
" " "	1883	40,767 16	9,303 66	2,235 50	3,047 42
" " "	1884	120,393 91	6,198 57	2,208 64	5,264 35
" " "	1885	121,382 84	.....	3,303 87	4,653 50
" " "	1886	75,103 30	.....	1,639 75	5,917 88
" " "	1887	179,541 63	.....	1,938 08	6,008 88
" " "	1888	114,879 35	.....	1.770 29	5,151 42
" " "	1889	47,592 13	29,677 92	3,242 05	5,935 94
" " "	1890	58,644 50	11,522 65	3,450 99	730 55
" " "	1891	9,826 49	3,164 81	3,803 66	4,888 98
" " "	1892	4,457 28	6,506 97	3,695 85	4,721 85
" " "	1893	5,962 47	10,838 90	3,739 86	2,087 17
" " "	1894	3,412 32	20,403 93	3,785 47	4,988 59
" " "	1895	53,907 70	21,143 41	4,184 18	3,374 49
" " "	1896	392,976 08	6,185 75	4,349 34	3,329 97
" " "	1897	486,575 70	13,880 37	4,965 39	3,497 90
" " "	1898	351,273 31	8,991 54	5,034 60	4,998 80
" " "	1899	166,611 49	6,179 79	5,048 72	6,454 49
" " "	1900	334,583 01	8,043 39	5,131 52	9,989 26
" " "	1901	284,503 89	10,494 82	5,254 51	13,075 89
" " "	1902	449,075 45	26,165 93	5,575 52	14,984 88
" " "	1903	523,950 74	18,548 58	6,993 25	10,791 15
" " "	1904	489,038 44	21,228 55	7,237 05	21,179 12
" " "	1905	333,261 75	36,853 28	12,071 88	26,056 78
" " "	1906	319,789 49	26,030 36	17,440 68	33,398 85
" " "	1907	153,045 42	35,360 10	19,229 25	36,516 47
" " "	1908	343,176 05	96,315 87	32,826 38	33,382 94
" " "	1909	1,099,836 38	80,517 65	32,028 57	44,849 83
" " "	1910	1,000,000 00	59,483 51	36,800 42	54,206 13
" " "	1911	1,682,449 32	78,914 08	38,019 33	40,178 54
" " "	1912	1,746,095 48	97,254 20	44,811 08	50,175 72
Total	.... *	11,302,045 89	755,045 10	327,506 45	477,755 63

* Total expenditure on Capital Account as above $11,302,045 89

LESS—Expenditure prior to Confederation.....$ 309,371 31
" Year 1880.... ..... 561 50
309,932 81

Agreeing with Public Accounts Balance Sheet, 1912, page 4.. . .. .$10,992,113 08

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

WELLAND CANAL.

—	Year ending.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		$ cts.	$ cts.	$ cts.	$ cts.
Imperial Government		222,220 00			
Government expenditure prior to confederation		7,416,019 83			
" since "	1868	12,097 84		37,679 05	38,852 96
" " "	1869	43,486 36		39,060 61	50,773 03
" " "	1870		22,173 72	40,340 45	65,009 19
" " "	1871		48,569 10	42,383 33	53,381 02
" " "	1872	53,680 32	6,022 44	37,085 37	50,276 90
" " "	1873	82,282 20	47,876 27	45,382 99	66,550 73
" " "	1874	746,420 61		50,966 48	103,666 99
" " "	1875	1,047,119 91		52,595 00	88,539 99
" " "	1876	1,569,478 19	700 00	57,623 31	81,376 12
" " "	1877	2,199,962 61		59,963 47	49,783 93
" " "	1878	2,138,392 99		60,138 59	66,393 53
" " "	1879	1,552,697 41		59,942 23	56,755 57
" " "	1880	1,252,924 75		63,198 10	76,535 25
" " "	1881	1,242,943 37	6,593 19	56,398 04	69,249 53
" " "	1882	603,402 17	13,664 80	74,641 51	84,374 97
" " "	1883	549,433 29	5,979 03	109,207 21	72,707 62
" " "	1884	432,336 21		113,276 87	90,926 97
" " "	1885	463,505 38	6,150 21	112,670 00	91,534 66
" " "	1886	215,380 75	1,359 00	111,660 22	69,507 48
" " "	1887	1,071,073 87	3,828 67	109,371 69	77,440 80
" " "	1888	429,720 94	10,740 86	110,806 01	86,518 97
" " "	1889	225,910 21	43,803 80	113,587 05	77,547 77
" " "	1890	117,633 22	51,648 28	109,202 02	72,686 19
" " "	1891	36,371 03	19,767 73	107,662 63	82,548 30
" " "	1892	29,541 21	9,008 80	104,673 73	73,771 87
" " "	1893	8,259 94	25,103 13	104,926 73	65,016 84
" " "	1894	1,571 78	13,430 20	102,018 80	53,053 71
" " "	1895	3,809 35	24,245 02	90,438 07	48,270 94
" " "	1896	1,677 67	18,768 99	87,988 11	62,542 64
" " "	1897	2,282 35	22,283 06	88,095 20	41,247 81
" " "	1898		34,803 25	84,806 54	59,571 66
" " "	1899		30,099 84	86,110 88	56,270 60
" " "	1900	18,167 29	37,164 84	84,888 36	59,507 64
" " "	1901	224,536 96	87,777 43	86,889 24	72,055 89
" " "	1902	303,997 81	78,905 37	88,048 95	69,279 90
" " "	1903	315,819 49	94,127 21	90.684 05	72,004 59
" " "	1904	555,751 00	31,140 58	91,115 35	85,717 88
" " "	1905	890,457 82	34,559 42	91,928 96	111,418 62
" " "	1906	715,198 24	28,799 66	107,932 96	78,704 93
" " "	1907	480,305 03	56,036 47	75,031 24	53,247 50
" " "	1908	806,760 46	138,430 19	108,101 56	78,460 40
" " "	1909	255,986 16	129,489 99	115,934 78	88,409 53
" " "	1910	168,247 17	75,233 28	136,783 47	77,723 23
" " "	1911	236,429 80	28,688 57	128,000 33	92,739 05
" " "	1912	159,946 87	28,238 13	149,848 27	105,056 89
Total	*	28,903,239 86	1,315,210 53	3,879,087 81	3,227,010 59

* Total expenditure as above	$	28,903,239 86
Less expenditure by Imperial Government		222,220 00
Agreeing with Public Accounts Balance Sheet, 1912, page 4	$	28,681,019 86

Original cost of construction, including first enlargement	$	7,693,824 03
Enlargement, including new Welland Canal		21,209,415 83
Total expenditure as above		28,903,239 86

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August, 1, 1912.

W. C. LITTLE,
Accountant.

STATEMENT showing the amounts expended on Construction, Renewals, &c—*Continued.*

WILLIAMSBURG CANAL.

	Year ending.	Capital.				Renewals Chargeable to Income.	Staff.	Repairs.
		Farran's Point.	Galops.	Rapide Plat.	Total.			
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation being amount of original construction					1,320,655 54			
Government expenditure since Confederation	1868						5,745 97	6,442 41
" " "	1869						5,769 81	5,670 88
" " "	1870						5,573 13	6,546 16
" " "	1871						6,382 17	5,308 41
" " "	1872					1,077 06	5,542 94	3,230 07
" " "	1873						6,424 49	7,347 75
" " "	1874						6,857 19	7,395 92
" " "	1875						6,547 62	4,110 29
" " "	1876						7,418 39	11,690 98
" " "	1877						7,388 68	10,053 61
" " "	1878						7,430 11	4,449 78
" " "	1879						7,517 20	3,549 71
" " "	1880						7,590 15	3,999 77
" " "	1881						7,572 35	5,020 73
" " "	1882						7,589 44	7,447 69
" " "	1883				13 19		7,423 48	7,299 39
" " "	1884				2,473 44		7,757 04	7,349 37
" " "	1885		70,764 07	32,473 05	103,237 12		7,696 67	8,198 03
" " "	1886		78,014 92	71,820 79	149,835 71		7,671 54	7,847 05
" " "	1887		32,862 02	82,990 98	115,853 00		7,635 54	7,904 76
" " "	1888		16,628 95	53,499 34	70,128 29	1,613 67	7,646 79	8,190 13
" " "	1889		37,661 15	22,206 11	59,867 26		7,485 28	8,794 61
" " "	1890		126,417 42	12,660 95	139,078 37		8,954 53	8,191 69
" " "	1891	2,853 76	172,779 88	55,036 96	230,670 60		8,678 25	7,987 40
" " "	1892		218,511 17	158,034 15	376,545 32	797 83	9,458 33	8,551 32
" " "	1893		154,524 01	217,669 28	372,193 29	3,675 00	8,676 03	8,347 97
" " "	1894		223,992 81	274,397 42	498,390 23		10,230 09	7,029 95
" " "	1895		118,464 53	228,892 70	347,357 23	13,720 36	9,675 09	7,371 37
" " "	1896	4,980 00	150,744 16	286,396 96	442,121 12	8,607 04	9,588 51	9,036 00
" " "	1897		262,793 78	205,480 55	468,274 33	3,880 76	8,697 54	8,210 71
" " "	1898	231,321 44	734,492 07	116,072 55	1,081,886 06		10,708 66	8,03 84

" " "	1899	346,956 54	987,186 44	57,869 18	1,392,012 16	7,410 00	9,960 64	10,000 00
" " "	1900	100,534 64	752,799 27	14,298 74	867,632 65	4,137 04	11,090 06	10,897 79
" " "	1901	111,158 39	390,112 78	76,501 57	577,772 74	.....	12,342 32	11,755 09
" " "	1902	42,209 89	421,945 81	137,818 22	601,973 92	.....	14,403 28	13,673 26
" " "	1903	10,266 92	320,354 92	18,483 34	349,105 18	.....	15,246 91	20,092 79
" " "	1904	18,700 00	256,536 30	26,774 27	302,010 57	1,978 85	20,570 17	19,430 05
" " "	1905	8,108 99	292,337 29	8,109 98	{ 8,209 63 / 308,556 26 }	5,573 69	23,399 45	21,492 46
" " "	1906	.....	140,920 65	.....	140,920 65	20,493 00	17,289 42	16,148 66
" " "	1907	.....	45,782 52	754 91	46,537 43	18,405 65	13,953 58	8,501 57
" " "	1908	.....	100,312 81	.....	100,312 81	16,635 15	19,441 86	18,563 82
" " "	1909	.....	11,987 59	.....	11,987 59	3,744 50	22,638 02	23,454 80
" " "	1910	.....	.....	.....	.....	.....	20,682 88	29,645 76
" " "	1911	.....	.....	.....	.....	2,622 39	21,893 61	21,681 75
" " "	1912	.....	.....	.....	3,200 00	43,965 21	25,753 98	26,875 25
Total		877,090 57	6,118,927 32	2,158,242 00	*10,488,811 69	158,337 14	488,000 59	472,819 80

* Original construction ..... $ 1,320,655 54
Cost of enlargement 9,168,156 15

Total $10,488,811 69

Included in total cost of St. Lawrence River and Canals, *see* page 22.

W. C. LITTLE,
Accountant.

Department of Railways and Canals,
Ottawa, August 1, 1912.

STATEMENT showing amount expended on Construction and Enlargement of Canals, to March 31, 1912.

Canal.		Construction.	Enlargement.	Total.
		$ cts.	$ cts.	$ cts.
Beauharnois		1,636,690 26		1,636,690 26
Carillon and Grenville		63,053 64	4,119,039 32	4,182,092 96
Chambly		637,214 66	79,255 76	716,470 42
Cornwall		1,945,624 73	5,297,179 48	7,242,804 21
Culbute		382,776 46		382,776 46
Lachine		2,589,532 85	10,352,146 14	12,941,678 99
Lake St. Francis			75,906 71	75,906 71
Lake St. Louis			298,176 11	298,176 11
Murray		1,248,946 71		1,248,946 71
Rideau		4,085,889 21		4,085,889 21
Sault-Ste-Marie		4,941,557 07		4,941,557 07
Soulanges		7,515,623 18		7,515,623 18
Ste. Anne's		134,456 51	1,035,759 12	1,170,215 63
St. Lawrence River and Canals		18,442 85	3,451,470 56	3,469,913 41
St. Ours		121,537 65	4,396 28	125,843 93
St. Peter's		648,547 14		648,547 14
Tay		489,599 23		489,599 23
Trent		11,302,045 89		11,302,045 89
Welland		7,693,824 03	21,209,415 83	28,903,239 86
Williamsburg	Farran's Point		877,090 57	10,488,811 69
	Galops		6,118,927 32	
	Rapide Plat		2,158,242 00	
	Williamsburg	1,320,655 54	13,896 26	
Total		46,776,017 61	55,090,811 46	101,866,829 07

* Construction by Imperial Government not included. Records relating to same were kept in Ordnance Office, Montreal, and were destroyed by fire in 1852.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS.
OTTAWA, August 1, 1912.

SESSIONAL PAPER No. 20

RECAPITULATION.

YEARLY Expenditure on Canals and Revenue received to March 31, 1912.

	Year ending.	Capital.	Income.	Staff.	Repairs.	Revenue received.
Government expenditure prior to Confederation, including Imperial Government expenditure.....	.....	$ cts. 20,593,866 13	$ cts. 98,378 46	$ cts.	$ cts.	$ cts. .....
Government expenditure since Confederation.	1868	33,784 06	95,347 79	113,084 50	101,646 44	403,879 19
" " ..	1869	126,898 20	55 00	116,069 76	118,579 31	400,263 32
" " .	1870	.....	90,355 96	120,403 02	150,176 70	414,687 02
" " ..	1871	.....	116,429 54	135,040 81	140,467 52	488,538 76
" " ..	1872	255,645 75	33,289 27	124,137 09	152,086 25	466,847 52
" " ..	1873	256,547 27	127,369 55	148,581 18	186,573 13	486,433 26
" " ..	1874	1,189,591 91	51,037 05	167,194 40	213,613 86	510,755 99
" " ..	1875	1,714,830 37	479 00	168,401 21	203,226 85	414,979 59
" " ..	1876	2,388,733 46	810 75	178,411 80	190,578 45	390,337 04
" " .	1877	4,131,374 30	22 30	179,661 40	138,448 51	390,857 37
" " ..	1878	3,843,338 62	.....	187,521 31	122,251 60	373,814 17
" " ..	1879	3,064,098 61	.....	191,892 44	115,349 99	337,675 13
" " ..	1880	2,123,366 34	.....	195,039 33	147,167 52	341,598 14
" " ..	1881	2,075,891 65	7,246 69	197,573 62	154,653 63	361,558 17
" " ..	1882	1,593,174 09	55,025 03	224,572 61	187,399 02	325,231 54
" " ..	1883	1,763,001 97	62,503 14	269,415 01	178,617 86	361,604 01
" " ..	1884	1,577,295 42	60,993 99	280,657 29	192,219 38	372,561 69
" " ..	1885	1,504,621 47	58,298 29	280,226 20	201,708 47	321,289 47
" " ..	1886	1,333,324 80	31,984 02	282,323 63	198,251 97	328,977 43
" " .	1887	1,783,698 16	65,983 06	285,172 62	198,888 84	321,784 88
" " ..	1888	1,033,118 34	120,561 59	292,458 76	201,928 93	317,902 04
" " ..	1889	972,918 43	162,015 49	301,040 23	240,261 36	333,188 90
" " ..	1890	1,026,364 24	146,853 54	290,516 63	176,089 00	354,816 92
" " ..	1891	1,318,092 15	165,843 87	294,562 12	204,768 45	349,431 90
" " ..	1892	1,437,149 30	194,129 61	293,115 58	231,089 54	324,475 24
" " ..	1893	2,069,573 30	196,185 84	291,048 97	204,759 39	357,089 87
" " ..	1894	3,027,164 19	110,512 07	294,446 34	179,630 13	387,788 97
" " ..	1895	2,452,273 65	216,057 58	281,477 04	164,033 71	339,890 49
" " ..	1896	2,258,778 97	85,820 49	292,121 05	209,321 60	339,538 72
" " ..	1897	2,348,636 91	101,205 74	287,970 36	178,385 47	384,780 53
" " ..	1898	3,207,249 79	82,400 55	280,872 44	203,478 86	407,652 81
" " ..	1899	3,899,877 31	82,205 60	280,628 57	202,312 36	369,044 38
" " ..	1900	2,639,564 93	120,653 93	292,609 24	227,626 97	322,642 86
" " ..	1901	2,360,569 89	135,500 57	314,095 04	262,876 07	315,425 69
" " ..	1902	2,114,689 88	213,044 91	317,838 61	263,768 27	300,413 68
" " ..	1903	1,823,273 61	275,103 58	390,281 82	294,113 92	230,213 15
" " ..	1904	1,880,787 20	298,678 23	381,016 82	350,278 54	79,536 51
" " ..	1905	2,071,593 72	352,855 43	431,499 60	401,742 79	78,009 21
" " ..	1906	1,552,121 21	310,716 70	447,962 92	375,889 60	108,067 76
" " ..	1907	887,838 61	254,423 18	329,629 63	287,231 03	105,003 15
" " ..	1908	1,708,156 37	483,250 11	473,638 95	411,660 53	144,882 13
" " ..	1909	1,868,834 45	699,304 73	475,515 04	433,958 10	199,501 26
" " ..	1910	1,650,706 64	459,835 62	515,585 16	491,793 02	193,384 28
" " ..	1911	2,349,474 49	385,534 55	511,305 94	471,530 32	221,138 49
" " ..	1912	2,554,938 91	384,860 73	585,899 54	555,709 95	264,114 48
Total.....	.....	101,866,829 07	6,993,163 13	12,792,515 63	10,516,143 21	14,641,607 11

* This does not include expenditure which has been charged to Canals General but only the amount expended on specified canals.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

CANAL REVENUE STATEMENT FOR YEAR ENDING MARCH 31, 1912.

Canal Revenue.			Hydraulic and other Rents, &c.	Total.	Collection Divisions. 1911-12.	Deposits to the credit of the Receiver General.		Total.	Cost of Staff, Repairs and Offices of Collection, chargeable to Revenue.
Wharfage, Storage, &c.	Port Colborne Elevator.	Total Canal Revenue Accrued.				On Account. Canal Revenue.	On Account. Hydraulic Rents.		
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.		$ cts.	$ cts.	$ cts.	$ cts.
					Welland Canal				238,915 40
12 30		12 30	6,320 55	6,332 85	Port Colborne	12 30	6,320 55	6,332 85	3,184 46
293 44		293 44	40,421 93	40,715 37	Port Dalhousie	293 44	40,421 93	40,715 37	2,614 67
	46,590 72	46,590 72		46,590 72	Port Colborne Elevator	46,590 72		46,590 72	23,615 46
305 74	46,590 72	46,896 46	46,742 48	93,638 94	Totals	46,896 46	46,742 48	93,638 94	268,329 99
					St. Lawrence Canals				484,663 28
			14,665 69	14,665 69	Beauharnois		14,665 69	14,665 69	
691 48		691 48	5,864 50	6,555 98	Cornwall	691 48	5,864 50	6,555 98	1,960 85
70 00		70 00	2,310 00	2,380 00	Cardinal	70 00	2,310 00	2,380 00	813 10
908 80		908 80		908 80	Lachine	908 80		908 80	2,629 53
12,395 25		12,395 25	116,438 51	128,833 76	Montreal	12,395 25	116,438 51	128,833 76	13,243 11
10 00		10 00	3,117 00	3,127 00	Coteau Landing	10 00	3,117 00	3,127 00	1,834 83
					Kingston				722 20
14,075 53		14,075 53	142,395 70	156,471 23	Totals	14,075 53	142,395 70	156,471 23	505,866 40
					Chambly Canal				71,503 33
4 00		4 00	50 00	54 00	Chambly	4 00	50 00	54 00	1,534 05
			38 00	38 00	St. Johns		38 00	38 00	1,815 98
					St. Ours				756 10
4 00		4 00	88 00	92 00	Totals	4 00	88 00	92 00	75,609 46
					Ottawa Canals				42,536 70
			5 00	5 00	Grenville		5 00	5 00	679 50
			184 00	184 00	Carillon		184 00	184 00	723 02
			30 00	30 00	Ste. Anne's Lock		30 00	30 00	966 00
			219 00	219 00	Totals		219 00	219 00	44,905 22

467 22		467 22	3,190 05	3,657 27	*Rideau Canal*				144,423 15
50 60		50 00	323 00	373 00	Ottawa	467 22	3,190 05	3,657 27	1,754 81
55 00		55 00	80 70	135 70	Kingston Mills	50 00	323 00	373 00	545 90
					Smith's Falls	55 00	80 70	135 70	560 85
572 22		572 22	3,593 75	4,165 97	Totals	572 22	3,593 75	4,165 97	147,284 71
			32 00	32 00	*St. Peter's Canal*		32 00	32 00	5,330 11
			5 00	5 00	*Murray Canal* – Brighton		5 00	5 00	8,032 87
					Trent Valley Canal				94,986 80
					Bobcaygeon				99 96
					Rosedale				101 75
					Gamebridge				50 00
94 50		94 50	8,405 84	8,500 34	Peterborough	94 50	8,405 84	8,500 34	220 00
					Young's Point				150 75
94 50		94 50	8,405 84	8,500 34	Totals	94 50	8,405 84	8,500 34	95,609 26
485 00		485 00	505 00	990 00	*Sault Ste. Marie Canal*	485 00	505 00	990 00	57,776 76
15,536 99	46,590 72	62,127 71	201,986 77	264,114 48	Totals	62,127 71	201,986 77	264,114 48	1,208,744 78
					Dredge Vessels				17,968 28
					Department of Public Printing and Stationery				774 40
					General				25,171 24
					Grand Totals	62,127 71	201,986 77	264,114 48	1,251,658 70
					Less Refunds			397 73	
					Net Revenue			263,716 75	

W. C. LITTLE,
Accountant.

Department of Railways and Canals,
Ottawa, August 1, 1912.

HYDRAULIC AND OTHER RENTS.

Balance due April 1, 1911.	Accrued during the year ended March 31, 1912	Total.	Canals.	Abatement unearned rent.	Deposited to the credit of the Receiver General.	Paid into hands of the Collectors.	Balance due March 31, 1912	Totals.
$ cts.	$ cts.	$ cts.		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
48,821 45	82,077 31	130,898 76	....Welland	885 00	46,742 48	46,742 48	83,226 28	130,898 76
4,178 17	3,435 00	7,613 17	....Williamsburg		2,310 00	2,310 00	5,303 17	7,613 17
3,058 12	7,605 50	10,663 62	....Cornwall		5,864 50	5,864 50	4,799 12	10,663 62
7,057 34	14,864 54	21,921 88	....Beauharnois		14,665 69	14,665 69	7,256 19	21,921 88
42,569 25	115,332 61	157,901 86	....Lachine	4,360 34	116,438 51	116,438 51	37,148 01	157,901 86
885 84	138 00	1,023 84	....Chambly	50 00	88 00	88 00	885 84	1,023 84
5,702 70	4,221 00	9,923 70	....Rideau		3,593 75	3,593 75	6,329 95	9,923 70
763 45	9,028 94	9,792 39	....Trent	18 75	8,405 84	8,405 84	1,367 80	9,792 39
70 00	515 00	585 00	....Sault Ste. Marie		505 00	505 00	80 00	585 00
27,545 65	595 00	28,140 65	....Carillon & Grenville	46 57	189 00	189 00	27,905 08	28,140 65
	3,117 00	3,117 00	....Soulanges		3,117 00	3,117 00		3,117 00
9 00	69 00	78 00	....Sundry Canals		67 00	67 00	11 00	78 00
140,660 97	240,998 90	381,659 87	Totals	5,360 66	201,986 77	201,986 77	174,312 44	381,659 87

W. C. LITTLE,
Accountant

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August, 1, 1912.

SESSIONAL PAPER No. 20

RECAPITULATION—STATEMENT OF EXPENDITURE BY CANAL TO MARCH 31, 1912.

Canals.	Capital.	Income.	Staff.	Repairs.	Total.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Bay Verte		44,387 53			44,387 53
Beauharnois	1,636,690 26	265,810 84	649,574 89	525,691 23	3,077,767 22
Carillon and Grenville	4,182,092 96	340,192 61	683,765 84	500,290 21	5,706,341 62
Chambly	716,470 42	723,610 78	807,091 16	743,081 41	2,990,253 77
Cornwall	7,242,804 21	488,662 62	1,223,207 95	765,717 98	9,720,392 76
Culbute Lock	382,776 46	60,923 37	11,507 48	7,036 15	462,243 46
Lachine	12,941,678 99	1,368,025 41	2,261,910 50	1,615,873 45	18,187,488 35
Lake St. Francis	75,906 71	25,043 68			100,950 39
Lake St. Louis	298,176 11				298,176 11
Murray	1,248,946 71	86,354 09	111,676 82	81,422 79	1,528,400 41
Rideau	4,085,889 21	467,527 57	1,424,167 86	1,311,893 97	7,289,478 61
Sault Ste. Marie	4,941,557 07	266,371 20	287,813 28	238,860 67	5,734,602 22
Soulanges	7,515,623 18	102,663 96	345,294 11	309,640 13	8,273,221 38
Ste. Anne's Lock	1,170,215 63	69,621 46	97,793 24	120,437 06	1,458,067 39
St. Lawrence River and Canals	3,469,913 41	128,298 11			3,598,211 52
St. Ours' Lock	125,843 93	169,985 80	97,709 93	84,333 96	477,873 62
St. Peter's	648,547 14	156,342 68	96,407 72	34,278 18	935,575 72
Tay	489,599 23	748 65			490,347 88
Trent	11,302,045 89	755,045 10	327,506 45	477,755 63	12,862,353 07
Welland	28,903,239 86	1,315,210 53	3,879,087 81	3,227,010 59	37,324,548 79
Williamsburg	10,488,811 69	158,337 14	488,000 59	472,819 80	11,607,969 22
	101,866,829 07	6,993,163 13	12,792,515 63	10,516,143 21	132,168,651 04
Expendit. on Canals General					2,286,429 12
Total expenditure on Canals					134,455,080 16

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

ANNAPOLIS AND DIGBY RAILWAY.

	Year.	Capital.	Income Expenses.
		$ cts.	$ cts.
Government expenditure prior to Confederation			
" since "	1868		
" " "	1869		
" " "	1870		
" " "	1871		
" " "	1872		
" " "	1873		
" " "	1874		
" " "	1875		
" " "	1876		
" " "	1877		
" " "	1878		
" " "	1879		
" " "	1880		
" " "	1881		
" " "	1882		
" " "	1883		
" " "	1884		
" " "	1885		
" " "	1886		
" " "	1887		
" " "	1888		
" " "	1889	9,847 27	
" " "	1890	381,942 75	
" " "	1891	196,869 36	
" " "	1892	26,129 89	
" " "	1893	2,190 62	
" " "	1894	1,675 36	
" " "	1895	570 55	
" " "	1896		
" " "	1897	41,457 29	
" " "	1898		
" " "	1899		
" " "	1900		
" " "	1901		8,381 82
" " "	1902		
" " "	1903		
" " "	1904		
" " "	1905		
" " "	1906		
" " "	1907		
" " "	1908		
" " "	1909		
" " "	1910		
" " "	1911		
" " "	1912		
Total		*660,683 09	8,381 82

* Of this amount Parliament voted under 52 Vic., chap. 8, the sum of $500,000 as a subsidy to the Western Counties Railway, N.S.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August, 1, 1912.

CANADA EASTERN RAILWAY.

	Year.	Capital.
		$ cts.
Government expenditure prior to Confederation		
" since " "	1868	
" " "	1869	
" " "	1870	
" " "	1871	
" " "	1872	
" " "	1873	
" " "	1874	
" " "	1875	
" " "	1876	
" " "	1877	
" " "	1878	
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" " "	1882	
" " "	1883	
" " "	1884	
" " "	1885	
" " "	1886	
" " "	1887	
" " "	1888	
" " "	1889	
" " "	1890	
" " "	1891	
" " "	1892	
" " "	1893	
" " "	1894	
" " "	1895	
" " "	1896	
" " "	1897	
" " "	1898	
" " "	1899	
" " "	1900	
" " "	1901	
" " "	1902	
" " "	1903	
" " "	1904	
" " "	1905	800,000 00
" " "	1906	
" " "	1907	
" " "	1908	19,000 00
" " "	1909	
" " "	1910	
" " "	1911	
" " "	1912	
Total		*819,000 00

*Included in total cost of Intercolonial Railway system, page 45.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS.
OTTAWA, August 1, 1912.

CANADIAN PACIFIC RAILWAY.

——	Year.	Construction, including subsidy of $25,000,000.	Working Expenses.	Revenue received.
		$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation				
" since "	1868			
" " "	1869			
" " "	1870			
" " "	1871	30,148 32		
" " "	1872	489,428 16		
" " "	1873	561,818 44		
" " "	1874	310,224 88		
" " "	1875	1,546,241 67		
" " "	1876	3,346,567 06		
" " "	1877	1,691,149 97		
" " "	1878	2,228,373 13		
" " "	1879	2,240,285 47		
" " "	1880	4,044,522 72	78,892 01	104,975 69
" " "	1881	4,968,503 93	236,944 98	291,498 06
" " "	1882	(1) 4,589,075 79	1,786 20	
" " "	1883	(2) 10,033,800 04	266 09	
" " "	1884	(3) 11,192,722 02	327 02	
" " "	1885	(4) 9,900,281 53		
" " "	1886	(5) 3,672,584 81		
" " "	1887	(6) 915,057 49		
" " "	1888	52,098 65		
" " "	1889	86,716 07		
" " "	1890	40,980 54		
" " "	1891	37,367 00		
" " "	1892	66,211 39		
" " "	1893	413,836 49		
" " "	1894	146,539 87		
" " "	1895	49,209 77		
" " "	1896	65,669 49		
" " "	1897	14,054 50		
" " "	1898	692 17		
" " "	1899	8,418 53		
" " "	1900	236 11		
" " "	1901	8,978 87		
" " "	1902	448 70		
" " "	1903			
" " "	1904	33,076 39		
" " "	1905			
" " "	1906			
" " "	1907			
" " "	1908	600 00		
" " "	1909	937 77		
" " "	1910			
" " "	1911	2,918 35		
" " "	1912			
Total		*62,789,776 09	318,216 30	396,473 75

* Agrees with Public Accounts Balance Sheet, 1911-1912, page 8.

(1) Including $ 2,210,000 00 on account subsidy.
(2) " 5,323,076 60 "
(3) " 7,254,208 27 "
(4) " 6,862,201 00 "
(5) " 2,890,427 00 "
(6) " 460,087 13 "

†$25,000,000 00

† *See* also statement page 56 and following for the expenditure.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

CAPE BRETON RAILWAY.

	Year.	Capital.	Working Expenses.
		$ cts.	$ cts.
Government expenditure prior to Confederation			
" since "	1868		
" " "	1869		
" " "	1870		
" " "	1871		
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" " "	1886		
" " "	1887	76,501 89	
" " "	1888	689,450 50	
" " "	1889	1,083,276 60	
" " "	1890	1,170,523 62	
" " "	1891	521,441 62	
" " "	1892	99,936 96	
" " "	1893	59,982 74	
" " "	1894	158,770 61	
" " "	1895	*	
" " "	1896	*	
" " "	1897	405 00	
" " "	1898	389 60	
" " "	1899		
" " "	1900		
" " "	1901		
" " "	1902		
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" " "	1910		
" " "	1911		
" " "	1912		
Total		§3,860,679 14	†

* Included in Intercolonial Railway capital. † Included in Intercolonial Railway working expenses.
Included in total cost of Intercolonial Railway system, see page 45.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

CARLETON BRANCH RAILWAY.

	Year.	Capital.	Working Expenses.
		$ cts.	$ cts.
Government expenditure prior to Confederation			
" since "	1868		
" " "	1869		
" " "	1870		
" " "	1871		
" " "	1872		
" " "	1873		
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" " "	1886	85,610 69	
" " "	1887	2,299 62	
" " "	1888	500 17	
" " "	1889		
" " "	1890		
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" " "	1910		
" " "	1911		
" " "	1912		
Total		88,410 48	
* Less amount received from city of St. John, N.B.		40,000 00	
		48,410 48	

* Victoria, chap. 6, transferred the Carleton Branch Railway to the city of St. John N.B. for the sum of $40,000, which sum was paid, in March, 1893, to the Receiver General.

W. C. LITTLE.
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August, 1, 1912.

DRUMMOND COUNTY RAILWAY.

	Year.	Construction.	Working Expenses.
		$ cts.	$ cts.
Government expenditure prior to Confederation			
" since "	1868		
" " "	1869		
" " "	1870		
" " "	1871		
" " "	1872		
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" " "	1898		
" " "	1899		
" " "	1900	1,459,000 00	
" " "	1901		
" " "	1902	5,000 00	
" " "	1903		
" " "	1904		
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" " "	1910		
" " "	1911		
" "	1912		
Total		*1464,000 00	

* Included in total cost of Intercolonial Railway system, page 45.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

EASTERN EXTENSION RAILWAY.

——	Year.	Capital.	Working Expenses.	Revenue Received.
		$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation.				
" since " "	1868			
" " "	1869			
" " "	1870			
" " "	1871			
" " "	1872			
" " "	1873			
" " "	1874			
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" " "	1883			
" " "	1884	1,284,311 97	10,033 77	30,767 66
" " "	1885	2,055 92	78,273 65	73,050 01
" " "	1886	183 79	94,756 06	66,893 11
" " "	1887		94,254 04	64,107 10
" " "	1888		90,954 73	70,552 20
" " "	1889	34,235 73	90,719 04	72,436 65
" " "	1890		79,102 77	84,658 95
" " "	1891	3,255 40	*	†
" " "	1892		*	†
" " "	1893		*	†
" " "	1894		*	†
" " "	1895		*	†
" " "	1896		*	†
" " "	1897		*	†
" " "	1898		*	†
" " "	1899		*	†
" " "	1900		*	†
" " "	1901		*	†
" " "	1902		*	†
" " "	1903		*	†
" " "	1904		*	†
" " "	1905		*	†
" " "	1906		*	†
" " "	1907		*	†
" " "	1908		*	†
" " "	1909		*	†
" " "	1910		*	†
" " "	1911		*	†
" " "	1912		*	†
Total		‡ 1,324,042 81	538,094 06	462,465 68

* Included in Intercolonial Railway expenses. † Included in Intercolonial Railway revenue.
‡ Included in total cost of Intercolonial Railway system, page 45.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS.
OTTAWA, August 1, 1912.

HUDSON BAY RAILWAY.

	Year.	Capital.
		$ cts.
Government expenditure prior to Confederation		
" since "	1868	
" " "	1869	
" " "	1870	
" " "	1871	
" " "	1872	
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" " "	1907	
" " "	1908	
" " "	1909	92,427 83
" " "	1910	53,042 63
" " "	1911	184,149 81
" " "	1912	159,632 00
Total		489,252 27

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

INTERCOLONIAL RAILWAY.

—	Year.	Construction.	Income.	Working Expenses including Windsor Branch Ry.	Revenue received, including Windsor Branch Ry.
		$ cts.	$ cts.	$ cts.	$ cts.
Expenditure prior to Confederation...	....	10,766,725 54	.....	.....	.....
since.	....	1868 483,353 65	.....	359,961 08	420,752 58
" "	....	1869 282,615 18	.....	387,548 47	455,022 76
" "	....	1870 1,729,381 49	.....	445,208 75	471,245 09
" "	....	1871 2,916,782 13	.....	442,993 31	565,713 52
" "	....	1872 5,131,141 51	.....	595,076 22	622,900 56
" "	....	1873 5,201,450 37	.....	1,011,892 60	703,458 26
" "	....	1874 3,614,898 81	.....	1,847,175 24	893,430 17
" "	....	1875 3,426,099 55	.....	1,532,589 62	861,593 43
" "	....	1876 1,108,321 59	.....	1,277,197 79	848,861 46
" "	....	1877 1,318,352 19	.....	1,661,673 55	1,154,445 35
" "	....	1878 408,816 74	.....	1,811,273 56	1,378,946 78
" "	....	1879 226,639 19	.....	2,010,183 22	1,294,099 69
" "	....	1880 2,048,014 60	.....	1,607,956 70	1,520,310 45
" "	....	1881 608,732 80	.....	1,780,353 53	1,777,856 76
" "	....	1882 585,568 79	.....	2,080,592 37	2,100,315 85
" "	....	1883 1,616,632 96	.....	2,383,477 20	2,395,034 99
" "	....	1884 1,405,377 52	.....	2,366,719 95	2,376,666 19
" "	....	1885 1,195,363 08	.....	2,460,229 87	2,392,605 00
" "	....	1886 544,958 17	.....	2,508,473 10	2,406,858 88
" "	....	1887 823,070 86	.....	2,854,158 91	2,621,337 41
" "	....	1888 742,203 09	.....	3,300,481 94	2,937,337 40
" "	....	1889 655,228 13	.....	3,174,785 19	2,923,736 46
" "	....	1890 365,246 48	.....	3,500,455 80	2,958,243 38
" "	....	1891 79,929 34	.....	3,691,273 65	3,007,630 51
" "	....	1892 168,101 77	.....	3,458,891 39	2,978,950 82
" "	....	1893 228,984 79	.....	3,062,207 45	3,099,815 20
" "	....	1894 166,362 43	.....	2,999,317 07	3,020,485 74
" "	....	1895 327,034 51	.....	2,964,940 98	2,979,795 59
" "	....	1896 259,105 23	.....	3,029,304 08	2,994,201 93
" "	....	1897 145,142 00	.....	2,936,789 71	2,906,631 25
" "	....	1898 252,367 20	70,000 00	3,275,830 14	3,154,896 49
" "	....	1899 1,081,929 94	210,000 00	3,478,559 30	3,775,558 08
" "	....	1900 1,796,348 29	.....	4,444,296 25	4,599,423 14
" "	....	1901 3,633,836 57	.....	5,477,285 30	5,019,497 76
" "	....	1902 4,621,841 05	.....	5,596,939 57	5,720,990 50
" "	....	1903 2,254,266 68	.....	6,214,496 38	6,366,884 53
" "	....	1904 †1,880,856 60	.....	7,264,263 13	6,392,865 48
" "	....	1905 3,937,621 93	.....	8,535,689 91	6,833,561 50
" "	....	1906 ‡3,765,170 90	.....	7,599,400 33	7,693,282 40
" "	....	1907 1,506,209 26	.....	6,045,597 15	6,293,751 52
" "	....	1908 4,363,494 01	.....	9,195,347 64	9,229,989 21
" "	....	1909 3,867,232 16	.....	9,364,256 10	8,583,100 79
" "	....	1910 1,278,409 45	.....	8,668,620 23	9,328,888 97
" "	....	1911 762,869 06	.....	9,613,774 77	9,911,974 83
" "	....	1912 1,710,448 56	.....	10,624,889 89	10,666,962 44
Total	....	*85,292,536 15	280,000 00	168,036,428 39	160,639,911 10

* Including $296,872.90 paid to Nova Scotia Ry. and European and North American Ry., N.B., and charged to 'Consolidated Fund.'

† Expenditure for year..... $1,894,856 90
Less refunds of previous years..... 14,000 30

$1,880,856 60

‡ Expenditure for the year..... $3,760,942 95
Add refunded cheque of 1901-2 paid during fiscal year 1905-6..... 4,227 95

$3,765,170 90

Statement continued page 45.

INTERCOLONIAL RAILWAY—*Concluded.*

Total cost of construction as shown on page 44			†$85,292,536 15
Less amounts transferred from Capital to Consolidated Fund as follows :—			
European and North American Railway from 1868 to 1873	$ 88,363 18		
Nova Scotia Railway from 1868 to 1873	208,509 72		
		$296,872 90	
			$ 84,995,663 25
To which add the follcwing :—			
Canada Eastern Railway, page 37			819,000 00
Cape-Breton Railway, page 39			3,860,679 14
Drummond County Railway, page 41			1,464,000 00
Eastern Extension Railway, page 42			1,324,042 81
Montreal and European Short Line Railway, page 46			333,942 72
Oxford and New-Glasgow Railway, page 48			1,949,063 21
Total capital cost of Intercolonial Railway System			*$ 94,746,391 13

*Agreeing, less outstanding cheques, with Public Accounts, 1911-1912, page 4.

† Includes $220.48, amount of an Exchequer Court award in 1907 against the Oxford and New-Glasgow Railway.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August, 1, 1912.

MONTREAL AND EUROPEAN SHORT LINE RAILWAY.

	Year.	Construction.	Working Expenses.
		$ cts.	$ cts.
Government expenditure prior to Confederation			
" since "	1868		
" " "	1869		
" " "	1870		
" " "	1871		
" " "	1872		
" " "	1873		
" " "	1874		
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" " "	1885	49,587 45	
" " "	1886	135 214 38	
" " "	1887	24,157 32	
" " "	1888	397 35	
" " "	1889		
" " "	1890		
" " "	1891	124,568 23	
" " "	1892		
" " "	1893		
" " "	1894	17 99	
" " "	1895		
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" " "	1910		
" " "	1911		
" " "	1912		
Total		*333,942 72	

* Included in total cost of Intercolonial Railway system, page 45.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA August 1, 1912.

NATIONAL TRANSCONTINENTAL RAILWAY.

	Year.	Construction.
		$ cts.
Government expenditure prior to Confederation		
" since " "	1868	
" " " "	1869	
" " " "	1870	
" " " "	1871	
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" " " "	1903	
" " " "	1904	6,249 40
" " " "	1905	778,491 28
" " " "	1906	1,841,269 95
" " " "	1907	5,537,867 50
" " " "	1908	18,910,449 41
" " " "	1909	24,892,422 68
" " " "	1910	19,968,126 86
" " " "	1911	23,488,208 40
" " " "	1912	21,110,683 05
Total		* 116,533,768 53

*Agrees with Public Accounts Balance Sheet, 1911-1912, page 4.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

OXFORD AND NEW GLASGOW RAILWAY.

—	Year.	Capital.	Working Expenses.
		$ cts.	$ cts.
Government expenditure prior to Confederation			
" since "	1868		
" " "	1869		
" " "	1870		
" " "	1871		
" " "	1872		
" " "	1873		
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" " "	1887		
" " "	1888	280,932 35	
" " "	1889	840,553 57	
" " "	1890	434,074 60	
" " "	1891	220,886 39	
" " "	1892	48,745 23	
" " "	1893	7,922 80	
" " "	1894	112,382 75	
" " "	1895	*	
" " "	1896	*	
" " "	1897	3,565 52	
" " "	1898		
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" " "	1910		
" " "	1911		
" " "	1912		
Total ...		‡ 1,949,063 21	†

* Included in Intercolonial Railway capital. † Included in Intercolonial Railway working expenses.

‡ Included in total cost of Intercolonial Railway system, page 45. Add $220.48 amount of Exchequer Court Award paid in 1907 and included in Intercolonial Ry.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

PRINCE EDWARD ISLAND RAILWAY.

	Year.	Construction.	Working Expenses.	Revenue received,
		$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation.		3,114,735 11		
" since "	1874		750 00	
" " "	1875	46,086 63	49,344 62	24,493 99
" " "	1876	42,546 10	219,930 43	118,060 96
" " "	1877	200,000 00	228,595 25	130,664 92
" " "	1878	6,551 86	221,599 49	135,899 60
" " "	1879	40,129 05	223,313 12	125,855 91
" " "	1880	16,539 82	164,640 55	113,851 11
" " "	1881		203,122 88	131,131 43
" " "	1882	402 03	228,259 97	137,267 54
" " "	1883	57,186 02	252,808 41	146,170 42
" " "	1884	130,663 38	236,428 13	144,504 12
" " "	1885	76,956 56	211,207 01	158,588 06
" " "	1886	4,668 33	216,744 34	155,584 36
" " "	1887	5,800 00	204,237 45	155,303 37
" " "	1888		229,639 95	158,363 62
" " "	1889		247,559 44	171,369 56
" " "	1890		266,485 85	160,971 78
" " "	1891		257,990 08	174,258 05
" " "	1892	8,300 49	289,706 38	157,442 69
" " "	1893		226,422 17	162,690 42
" " "	1894		226,891 06	158,533 83
" " "	1895		232,905 19	149,654 78
" " "	1896		225,138 56	146,476 54
" " "	1897		240,489 90	153,443 13
" " "	1898	17,541 88	231,418 74	158,950 61
" " "	1899	22,000 00	218,053 01	165,012 03
" " "	1900	53,546 02	220,931 81	174,738 73
" " "	1901	280,173 93	261,766 24	193,883 48
" " "	1902	475,997 94	270,159 97	197,999 93
" " "	1903	829,414 18	259,637 82	217,714 24
" " "	1904	698,877 47	335,695 44	234,390 03
" " "	1905	591,412 65	370,464 44	217,330 61
" " "	1906	496,124 89	294,253 16	257,270 57
" " "	1907	91,710 52	283,148 50	215,434 97
" " "	1908	390,461 83	399,947 79	304,579 83
" " "	1909	561,206 90	400,330 41	311,319 63
" " "	1910	206,396 97	427,283 73	319,074 74
" " "	1911	94,320 56	424,104 00	337,419 55
" " "	1912	128,011 91	449,962 91	367,203 39
Total		*8,687,793 03	9,951,368 20	6,942,902 53

* Agrees with Public Accounts Balance Sheet, 1911-1912, page 4.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

QUEBEC BRIDGE.

	Year.	Capital.	Income.
		$ cts.	$ cts.
Government expenditure prior to Confederation	1868		
" since "	1869		
" " "	1870		
" " "	1871		
" " "	1872		
" " "	1873		
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" " "	1908		
" " "	1909		422,867 12
" " "	1910		111,788 02
" " "	1911	227,563 40	
" " "	1912	603,293 07	
Total		830,856 47	534,655 14
Less amount received from the Phoenix Bridge Co., 1910			100,000 00
Total		830,856 47	434,655 14

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

SESSIONAL PAPER No. 20

YUKON TERRITORY WORKS.

(Stikine-Teslin Railway.)

	Year.	Construction.
		$ cts.
Government expenditure prior to Confederation		
" since "	1868	
" " "	1869	
" " "	1870	
" " "	1871	
" " "	1872	
" " "	1873	
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" " "	1899	
" " "	1900	
" " "	1901	
" " "	1902	283,323 55
" " "	1903	
" " "	1904	
" " "	1905	
" " "	1906	
" " "	1907	
" " "	1908	
" " "	1909	
" " "	1910	
" " "	1911	
" " "	1912	
Total		*283,323 55

*Included in Public Accounts Balance Sheet, 1902-1903, page 6.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

STATEMENT showing amount expended on Capital Account on Railways—including Quebec Bridge Reconstruction.

Railways.	$ cts.	$ cts.
Intercolonial	84,995,663 25	
Cape Breton	3,860,679 14	
Oxford and New Glasgow	1,949,063 21	
Eastern Extension	1,324,042 81	
Drummond County	1,464,000 00	
Montreal and European Short Line	333,942 72	
Canada Eastern	819,000 00	
Total		94,746,391 13
Carleton Branch		48,410 48
Prince Edward Island		8,687,793 03
Canadian Pacific		62,789,776 09
Annapolis and Digby		660,683 09
Yukon Territory Works (Stikine-Teslin Ry)		283,323 55
National Transcontinental		116,533,768 53
Governor General's car		56,538 82
Hudson Bay Railway		489,252 27
Quebec Bridge Reconstruction		830,856 47
Total		285,126,793 46
Memo. re Recapitulation—Railways.		
Total cost as per statement above		285,126,793 46
Add amounts transferred from Capital to Consolidated Fund, Intercolonial Railway, *see* statement page 45		296,872 90
Agreeing with total amount paid of Construction, as per statement, page 53		285,423,666 36

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

RECAPITULATION—GOVERNMENT RAILWAYS.

——	Year.	Construction.	Working expenses.	Revenue.
		$ cts.	$ cts.	$ cts.
Government expenditure prior to Confederation	.....	13,881,460 65	.....	.....
" since "	1868	483,353 65	359,961 08	420,752 58
" " "	1869	282,615 18	387,548 47	455,022 76
" " "	1870	1,729,381 49	445,208 75	471,245 09
" " "	1871	2,946,930 45	442,993 31	565,713 52
" " "	1872	5,620,569 67	595,076 22	622,900 56
" " "	1873	5,763,268 81	1,011,892 60	703,458 26
" " "	1874	3,925,123 69	1,847,925 24	893,430 17
" " "	1875	5,018,427 85	1,581,934 24	886,087 42
" " "	1876	4,497,434 75	1,497,128 22	966,922 42
" " "	1877	3,209,502 16	1,890,268 80	1,285,110 27
" " "	1878	2,643,741 73	2,032,873 05	1,514,846 38
" " "	1879	2,507,053 71	2,233,496 34	1,419,955 60
" " "	1880	6,109,077 14	1,851,489 26	1,739,137 25
" " "	1881	5,577,236 73	2,220,421 39	2,200,486 25
" " "	1882	5,175,046 61	2,310,638 54	2,237,583 39
" " "	1883	11,707,619 02	2,636,551 70	2,541,205 41
" " "	1884	14,013,074 89	2,613,508 87	2,551,937 97
" " "	1885	11,224,244 54	2,749,710 53	2,624,243 07
" " "	1886	4,443,220 17	2,819,973 50	2,628,336 35
" " "	1887	1,846,887 18	3,152,650 40	2,840,747 88
" " "	1888	1,765,582 11	3,621,076 62	3,166,253 22
" " "	1889	2,709,857 37	3,513,063 67	3,167,542 67
" " "	1890	2,392,767 99	3,846,044 42	3,203,874 11
" " "	1891	1,184,317 34	3,949,263 73	3,181,888 56
" " "	1892	417,425 73	3,748,597 77	3,136,393 51
" " "	1893	712,917 44	3,288,629 62	3,262,505 62
" " "	1894	585,749 01	3,226,208 13	3,179,019 57
" " "	1895	376,814 83	3,197,846 17	3,129,450 37
" " "	1896	324,774 72	3,254,442 64	3,140,678 47
" " "	1897	204,624 31	3,195,959 58	3,060,074 38
" " "	1898	270,990 85	3,507,248 88	3,313,847 10
" " "	1899	1,112,348 47	3,696,612 31	3,940,570 11
" " "	1900	3,309,130 42	4,665,228 06	4,774,161 87
" " "	1901	3,922,989 37	5,739,051 54	5,213,381 24
" " "	1902	5,386,611 24	5,861,099 54	5,918,990 43
" " "	1903	3,083,680 86	6,474,134 20	6,584,598 77
" " "	1904	2,619,059 86	7,599,958 57	6,627,255 51
" " "	1905	6,125,481 79	8,906,154 35	7,050,892 11
" " "	1906	6,102,565 74	7,893,653 49	7,950,552 97
" " "	1907	7,174,370 17	6,328,745 65	6,509,186 49
" " "	1908	23,684,005 25	9,595,295 43	9,534,569 04
" " "	1909	29,414,227 34	9,764,586 51	8,894,420 42
" " "	1910	21,505,975 91	9,095,903 96	9,647,963 71
" " "	1911	24,760,029 58	10,037,878 77	10,249,394 38
" " "	1912	23,712,098 59	11,074,852 80	11,034,165 83
.....	.....	*285,463,666 36	179,762,786 92	168,440,753 06

* Total amount paid on construction	$285,463,666 36
Less amount received from the City of St. John, N.-B., as purchase price of the Carleton Branch Railway	40,000 00
Cost of construction	†$285,423,666 36

† Agreeing with amount expended on Capital Account on Railways, see page 52.

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August, 1, 1912.

STATEMENT showing Miscellaneous Expenditure of the Department of Railways and Canals yearly.

Year ending	Chargeable to Capital.	Chargeable to Income.			Chargeable to Revenue.			Total, Yearly Expenditure
	Canals.	Canals.	Railways.	General.	Canals.	Railways.	General.	
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1868.				6,305 66	12,000 00		2,416 66	20,722 32
1869.				8,367 52	12,000 00		1,000 00	21,367 52
1870.				7,853 03	18,698 89		7,679 78	34,231 70
1871				34,773 72	12,018 98			46,792 70
1872.				20,049 50	12,208 76			32,258 26
1873.				36,891 74	12,099 44		6,889 20	55,880 38
1874.				40,098 84	12,959 25		5,428 98	58,487 07
1875.				35,579 24	12,047 43		5,620 17	53,246 84
1876.				42,920 10	86 08		5,690 28	48,696 46
1877.					51 87	43,639 97		43,691 84
1878.	1,860 00				556 00		34,388 59	36,804 59
1879.								
1880.	2,561 55				323 16			2,884 71
1881.	2,338 41				5,535 22			7,873 63
1882.					9,826 23			9,826 23
1883.	11,781 27				6,978 54			18,759 81
1884.	7,486 62		62,256 58		8,305 41			78,048 61
1885.	16,725 47		11,003 38		1,210 61			28,939 46
1886.	20,323 62		10,383 59		776 30			31,483 51
1887.	23,512 00		23,545 34		649 04			47,706 38
1888.	34,533 07		22,898 90		5,799 83			63,231 80
1889.	10,091 87		16,552 64		5,207 64			31,852 15
1890.	16,426 69		50,909 74		49,550 21			116,886 64
1891.	16,925 31		16,314 41		56,922 05			90,161 77
1892	6,540 49		19,062 51		65,074 07			90,677 07
1893.	8,498 41		4,313 73	28,640 93	63,965 54			105,418 61
1894.	2,883 11		4,855 11	15,746 31	60,265 22			83,749 75
1895.	4,132 28		13,221 27	19,304 87	60,769 56			97,427 98
1896.	10,893 40		6,562 20	25,194 21	70,340 22			112,990 03
1897.	2,937 47		5,118 99	25,142 90	62,777 12		597 39	96,573 87
1898.	1,719 69		8,327 96	28,042 10	56,284 42	1,400 00		95,774 17
1899.	1,318 79		67,005 86	22,085 19	66,850 29			157,260 13
1900.	11,873 35		33,496 99	22,802 18	58,836 57			127,009 09
1901.	12,267 99		28,658 78	33,986 68	61,938 61			136,852 06
1902.	3,658 23		21,752 58	34,138 50	65,770 65			125,319 96
1903.	2,491 84		15,570 43	35.398 00	63,175 19			116,635 46
1904.	3,730 79		85,353 17	36,262 32	66,067 30			191,413 58
1905.	1,498 14		97,507 00	38,660 52	64,515 07			202,180 73
1906.	9,160 44		99,018 80	37,484 64	62,171 45			207,835 33
1907.	9,687 55		92,115 62	34,183 75	66,251 27			202,238 19
1908.	14,999 70		24,760 08	178,266 39	45,115 99	105,518 99		368,661 15
1909.	5,034 00		28,819 54	181,615 90	20,912 04	106,055 87		342,447 35
1910.			29,421 06	200,329 52	4,706 79	111,755 68		346,213 05
1911.			54,734 48	218,178 85	2,369 52	103,398 27	1,000 00	379,681 12
1912.	5,999 20		57,151 70	257,670 45	2,922 06	110,049 21	3,950 00	437,742 62
	26,032 90	452,744 71	1,851,866 69	745,938 85	1,807,651 51	49,989 97	69,711 05	5,003,935 68

N. B.—The expenditure of Quebec Bridge included in Miscellaneous Expenditure (income railways) in 1909 and 1910 has been deducted from each of these years to form a separate account under the heading of "QUEBEC BRIDGE."

W. C. LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS.
OTTAWA, August 1, 1912.

RECAPITULATION—RAILWAYS AND CANALS, TO MARCH 31, 1912.

EXPENDITURE.

Chargeable to Capital Account—				
Railways, *see* Statement page 52				$ 285,126,793 46
Canals " " 31 and 54				101,892,861 97
				$ 387,019,655 43
Chargeable to Consolidated Fund—				
* Railway Subsidies as per Statement No. 3, page 56 to 67				$ 43,594,408 57
Income Account—				
Intercolonial Railway	*see* page	44	$ 280,000 00	
Add amount transferred from Capital	"	45	296,872 90	
Railways	"	54	1,851,866 69	
Canals	"	31	6,993,163 13	
"	"	54	452,744 71	
General Railways and Canals	"	54	745,938 85	
Quebec Bridge	"	50	434,655 14	
				11,055,241 42
Revenue Account—				
Canals—Operating and maintaining staff, *see* page 31			$ 12,792,515 63	
Canals—Repairs, *see* page 31			10,516,143 21	
" " " 54			1,807,651 51	
Railways—Working expenses *see* page 53			179,762,786 92	
" " " 54			49,989 97	
General—Railways and Canals	"	54	69 711 05	
			204,998,798 29	
				259,648,448 28
Total expenditure on Railways and Canals				$ 646,668,103 71

EXPENDITURE AS ABOVE SEPARATED AS BETWEEN RAILWAYS AND CANALS.

RAILWAYS.

Capital Account	$ 285,126,793 46	
Consolidated Fund	226,270,580 19	
		$ 511,397,373 65

CANALS.

Capital Account	$ 101,892,861 97	
Consolidated Fund	32,562,218 19	
		$ 134,455,080 16
Total		$ 645,852,453 81

GENERAL, COMMON TO BOTH.

Consolidated Fund	815,649 90
Total, expenditure on Railways and Canals	$ 646,668,103 71

REVENUE, SEPARATED AS BETWEEN RAILWAYS AND CANALS.

Railways—Revenue received from July 1, 1867, to March 31, 1911 (for details *see* page 53)	$ 168,440,753 06
Canals " " " (" " 31)	14,641,607 11
Total revenue, Railways and Canals	$ 183,082,360 17

*This amount does not include the subsidy of $25,000,000 to the Canadian Pacific Railway, nor the amount $660,683.08 expended on the Annapolis and Digby Railway, both of which are included in Capital Account, nor the annual payment of $219,700 to the Provincial Government of Quebec, being interest at the rate of 5 per cent on the sum of $2,394,000 up to 1905, granted by 47 Vict., cap. 8 (1884) and the annual payment of $107,730, being interest at the rate of 4½ per cent since and including 1905 on the said sum of $2,394,000 for the line between Ottawa and Quebec which sum was transferred to the Public Debt as a liability, and is dealt with by the Finance Department, *see* Public Accounts, 1898-1912 and page 79, 1908.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, August 1, 1912.

W. C. LITTLE,
Accountant.

STATEMENT showing the amount of subsidies paid during year 1911-12, and to whom paid.

	$ cts.
Central Ontario Ry. Co	411 84
St. Marys & Western Ont. Ry. Co.	365 00
Quebec, Montreal & Southern Ry. Co.	23,835 70
Canada & Gulf Terminal Ry. Co., (Formerly Matane & Gaspe Ry. Co.)	65,249 75
Quebec & Lake St. John Ry. Co., (La Tuque Branch).	27,520 00
Canadian Pacific Ry. Co., Moosejaw Northwesterly.	78,432 00
do do Winnipeg Beach to Gimli.	30,176 00
Atlantic, Quebec & Western Ry. Co.	91,279 60
Canadian Northern Quebec Ry. Co	86,468 03
Algoma Central & Hudson Bay Ry. Co.	133,584 00
Kettle River Valley Ry. Co.	148,800 00
Thessalon & Northern Ry. Co.	6,112 00
Vancouver & Lulu Island Ry. Co	61,760 00
Quebec & Saguenay Ry. Co.	104,992 00
Total.	859,400 25

W. C- LITTLE,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS.
OTTAWA, August 1, 1912.

STATEMENT

Showing subsidies voted for Railways as to which contracts have been entered into and payments made from July 1st, 1883 to March 31st, 1912.

STATEMENT showing subsidies voted for Railways as to which contracts

Subsidies Voted.		Number.	Railways.	July 1, 1883, to June 30 1905.
Authority.	Amount.			
	$ cts.			$ cts.
46 Vic., chap. 25 53 " 2	156,800 00	1	International Railway, Quebec	156,800 00
45 " 14 46 " 25 48-49 " 59 49 " 10 50-1 " 24 51 " 3 52 " 3 53 " 2 54-5 " 8 57-8 " 4	384,000 00 80,000 00 96,000 00 186,295 00 28,800 00 96,000 00 64,000 00 30,000 00 5,250 00 44,800 00	2	Quebec and Lake St. John Railway, Quebec	1,006,743 50
46. " 25 49 " 10 50-1 " 24 52 " 3 55-6 " 5	89,600 00 70,000 00 12,800 00 32,000 00 64,000 00	3	Kingston, Napanee and Western Ry., formerly Napanee, Tamworth and Quebec Ry., Ontario.	208,732 80
47 " 8 51 " 3 53 " 2	272,000 00 41,000 00 24,000 00	4	Pontiac Pacific Junction Railway, Quebec	193,578 00
46 " 25 47 " 8 50-1 " 24	115,200 00 76,800 00 32,000 00	5	Caraquette, Railway, N.B	224,000 00
47 " 8 49 " 10 52 " 3 53 " 2 56 " 2 57-8 " 4	32,000 00 57,600 00 22,400 00 48,000 00 48,000 00 70,400 00	6	Canadian Northern Quebec Ry. Co., formerly Great Northern Ry., Quebec	557,788 31
7-8 Ed. VII 63	*			
47 " 8	48,000 00	7	Kingston and Pembroke Railway, Ontario	48,000 00
45 " 14 46 " 26 53 " 2	660,000 00 660,000 00	8	Northern and Pacific Junction Railway, Quebec	1,320,000 00
47 " 8 48-9 " 59 49 " 10 48-9 " 59 51 " 3 57-8 " 4	128,000 00 19,200 00 32,000 00 24,439 84 140,800 00 35,200 00	9	Canada Eastern Ry., formerly Northern and Western Ry., N.B., including also Chatham Branch Railway	374,839 84
62-3 " 7 47 " 8 51 " 3	* 60,342 00	10	Quebec Central Railway, Quebec	348,342 00
7-8 " 63 53 " 2 48-9 " 59 53 " 2	288,000 00 72,000 00 40,000 00	11	Montreal and Sorel Railway, Quebec	93,757 57
48-9 " 59 50-1 " 24 51 " 3	30,000 00 64,000 00 9,600 00	12	Montreal and Champlain Junction Railway, Quebec	103,609 00
46 " 25 51 " 3	38,400 00 44,252 82	13	Elgin, Petitcodiac and Havelock Railway, N.B.	82,652 82
47 " 8	22,400 00	14	St. Louis and Richibucto Railway, N.B.	22,400 00
48-9 " 59 49 " 10 50-1 " 24	96,000 00 38,400 00 180,000 00	15	Canada Atlantic Railway, Ontario	282,355 20
47 " 6	750,000 00	16	Esquimalt and Nanaimo Railway, B.C.	750,000 00
47 " 8	96,000 00	17	Erie and Huron Railway, Ontario	96,000 00
46 " 25 47 " 8 52 " 3	320,000 00 300,000 00	18	Baie des Chaleurs Railway, Quebec	620,000 00
			Carried forward	6,489,590 04

have been entered into and payments made up to March 31, 1912.

Payments.							Total March 31, 1912.	No.
1905–1906.	1906–1907.	1907–1908.	1908–1909.	1909–1910.	1910–1911.	1911–1912.		
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
							156,800 00	1
86,016 00	67,712 00	73,472 00				27,520 00	1,261,463 50	2
							208,732 80	3
							193,578 00	4
							224,000 00	5
		256,870 40	55,449 60	164,172 29	144,608 51	86,468 03	1,265,357 14	6
							48,000 00	7
							1,320,000 00	8
							374,839 84	9
		55,638 69			129,320 61		533,301 30	10
							93,757 57	11
							103,600 00	12
							82,652 82	13
							22,400 00	14
							282,355 20	15
							750,000 00	16
							96,000 00	17
							620,000 00	18
86,016 00	67,712 00	385,981 09	55,449 60	164,172 29	273,929 12	113,988 03	7,636,838 17	

STATEMENT showing Subsidies voted for Railways as to which Contracts have

Subsidies Voted.		Number.	Railways.	July 1, 1883 to June 30, 1905.
Authority.	Amount.			
	$ cts.			$ cts.
			Brought forward	6,489,590 04
48-9 Vic., c. 59	118,400 00	1	New Brunswick and Prince Edward Island Ry	113,440 00
50-1 " 24	217,600 00	2	Laurentian Railway, formerly St. Lawrence, Lower Laurentian and Saguenay Ry., Quebec	217,600 00
49 " 10	11,200 00	3	L'Assomption Railway, Quebec	11,200 00
49 " 10	32,000 00	4	Great Eastern Railway, Quebec	40,345 00
50-1 " 24	96,000 00			
56 " 2	64,000 00			
53 " 2	37,500 00			
17 " 8	160,000 00	5	Iron lale, Bancroft and Ottawa Railway, Ontario	144,000 00
52 " 3				
49 " 10	96,000 00	6	Buctouche and Moncton Railway, N.B.	101,600 00
50-1 " 24	6,400 00			
47 " 8	51,200 00	7	Albert Southern Railway, N.B.	50,460 00
52 " 3				
50-1 " 24	65,200 00	8	Lake Temiscamingue Colonization Railway, Quebec	310,335 95
57-8 " 4	274,940 00			
49 " 10	38,400 00	9	Joggins Railway, N.S.	37,500 00
50-1 " 24	4,000 00			
45 " 14	240,000 00	10	Temiscouata Railway, N.B., and Quebec	645,950 00
48-9 " 58	258,000 00			
51 " 3	100,000 00			
53 " 2	51,200 00			
48-9 " 50	44,800 00	11	Leamington and St. Clair Railway, Ontario	51,200 00
50-1 " 24	6,400 00			
59 " 10	16,000 00	12	Toronto Grey and Bruce Railway, Ontario	14,656 00
50-1 " 24	22,400 00	13	Dominion Lime Co., Quebec	15,360 00
49 " 10	256,000 00	14	West Ontario Pacific Railway and Ontario and Quebec Railway	256,000 00
53 " 2				
50-1 " 24	96,000 00	15	Drummond County Railway, Quebec	423,936 00
52 " 3	14,400 00			
53 " 2	76,800 00			
57-8 " 4	96,000 00			
48-9 " 59	128,000 00	16	Brockville, Westport and Sault Ste. Marie, Ry., Ont	105,200 00
53 " 2				
54-5 " 8	64,000 00			
57-8 " 4				
49 " 10	32,000 00	17	Montreal and Lake Maskinongé Ry., Quebec	41,280 00
53 " 2	10,200 00			
50-1 " 24	54,400 00	18	South Norfolk Railway, Ontario	54,400 00
50-1 " 24	51,200 00	19	Guelph Junction Railway, Ontario	46,000 00
48-9 " 54	22,400 00	20	Belleville and North Hastings Railway, Ontario	21,888 00
49 " 19				
49 " 10	108,800 00	21	Hereford Railway, Quebec	155,200 00
52 " 0	48,000 00			
50-1 " 23	118,400 00	22	Lake Erie and Detroit River, Ry., Ontario	475,851 00
55-6 " 4	224,000 00			
62-3 " 5	*			
50-1 " 27	62,400 00	23	Beauharnois Junction Railway, Quebec	62,400 00
56 " 4				
50-1 " 24	138,400 00	24	St. Catharines and Niagara Central Ry., Ontario	38,400 00
55-6 " 5	108,000 00			
57-8 " 4	108,800 00			
52 " 3	30,000 00	25	Fredericton and St. Mary's Ry. Bridge Co., N.B.	30,000 00
50-1 " 24	9,600 00	26	Harvey Branch Railway Co., N.B.	5,553 57
55-6 " 5	240,000 00	27	Nova Scotia Central Railway Co., N.S.	235,200 00
61 " 1				
50-1 " 24	44,800 00	28	Cumberland Railway and Coal Co., N.S.	39,850 00
52 " 3	19,200 00	29	Pontiac and Renfrew Railway, Ontario	13,600 00
52 " 3	54,400 00	30	Thousand Islands Railway, Ontario	29,840 00
63-4 " 8	*			
			Carried forward	10,277,835 56

been entered into and payments made up to March 31, 1912—*Continued.*

Payments.							Total March 31, 1912	Number.
1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.		
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
86,016 06	67,712 00	385,981 09	55,449 60	164,172 29	273,929 12	113,988 03	7,636,838 17	
							113,440 00	1
							217,600 00	2
							11,200 00	3
							40,345 00	4
							144,000 00	5
							101,600 00	6
							50,460 00	7
							310,335 95	8
							37,500 00	9
							645,950 00	10
							51,200 00	11
							14,656 00	12
							15,360 00	13
							256,000 00	14
							423,936 00	15
	35,600 00						140,800 00	16
							41,280 00	17
							54,400 00	18
							46,000 00	19
							21,888 00	20
							155,200 00	21
							475,851 00	22
							62,400 00	23
							38,400 00	24
							30,000 00	25
							5,553 57	26
							235,200 00	27
							39,850 00	28
							13,600 00	29
							29,840 00	30
86,016 06	103,312 00	385,981 09	55,449 60	164,172 29	273,929 12	113,988 03	11,469,683 69	

STATEMENTS showing the subsidies voted for Railways as to which contracts have

Subsidies Voted.		Number.	Railways.	July 1, 1883, to June 30, 1905.
Authority.	Amount.			
	$ cts.			$ cts.
			Brought forward.....	10,277,835 56
52 Vic., chap. 3 56 " 3	96,000 00	1	Quebec, Montmorency and Charlevoix Ry. Co., Que.	96,000 00
52 " 3	375,000 00	2	St. Clair Frontier Tunnel Co., Ontario.....	375,000 00
50-1 " 24 57-8 " 4	57,600 00	3	Brantford, Waterloo and Lake Erie Ry., Ontario...	57,600 00
51 " 3 53 " 2	287,200 00	4	Port Arthur, Duluth and Western Ry., Ontario....	271,200 00
50-1 " 24 53 " 2 54-5 " 8 57-8 " 4	192,000 00	5	Montreal and Ottawa Railway, Ontario.....	192,000 00
50-1 " 24 52 " 3	44,800 00	6	Cornwallis Valley Railway, N.S.....	44,800 00
52 " 3	320,000 00	7	Ottawa, Northern and Western Ry., Quebec, formerly Ottawa and Gatineau Valley Railway	410,588 00
57-8 " 6 60-1 " 4	64,000 00			
47 " 8 51 " 3 52 " 3	83,612 54	8	Central Railway, N.B.....	226,012 54
53 " 2	142,400 00			
57-8 " 4 61 " 1 62-3 " 1	48,000 00			
53 " 2	361,270 00	9	Montreal and Western Railway, Quebec.....	361,270 00
52 " 3	128,000 00	10	Parry Sound and Colonization Railway, Ontario.....	152,800 00
57-8 " 4	64,000 00	11	Shuswap and Okanagan Railway, B.C.....	163,200 00
52 " 3	163,200 00			
54-5 " 8	89,600 00	12	Tobique Valley Railway, N.B.....	134,016 00
53 " 2	35,200 00			
55-6 " 5	9,600 00			
53 " 2	112,000 00	13	Columbia and Kootenay, B.C.....	88,800 00
53 " 2	35,200 00	14	Waterloo Junction Railway, Ontario.....	32,800 00
53 " 2	99,200 00	15	Orford Mountain Railway Co., Quebec.....	123,050 00
53 " 2	57,600 00	16	St. Lawrence and Adirondack Railway, Quebec...	149,481 60
55-6 " 5	25,024 00			
55-6 " 5	*40,000 00	17	New Glasgow Iron, Coal and Railway Co., N.S.....	39,840 00
56 " 2	102,400 00	18	United Counties Railway Co., Quebec	188,816 00
57-8 " 4	102,400 00			
55-6 " 5	*21,600 00	19	Philipsburg Junction Ry. Quarry Company, Quebec.	23,712 00
55-6 " 5	*430,400 00	20	Ottawa, Amprior and Parry Sound Ry., Ontario....	779,712 00
56 " 2	67,200 00	21	Montford Colonization, Railway, Quebec.....	167,440 00
57-8 " 4	38,400 00			
60-61 " 4	66,000 00			
55-6 " 5	48,000 00	22	Lotbinière and Megantic Railway, Quebec.....	96,000 00
57-8 " 4	48,000 00			
56 " 2	48,000 00	23	Grand Trunk, Georgian Bay and Lake Erie Ry., Ont.	39,744 00
55-6 " 5	80,000 00	24	Canadian Pac. Ry., B.C., Revelstoke to Arrow Lake.	30,000 00
57-8 " 4	121,600 00	25	Nakusp and Slocan Railway, B.C.....	117,760 00
55-7 " 5	89,600 00	26	Dominion Coal Company, N.S.....	87,808 00
56 " 2	22,400 00	27	Oshawa Railway and Navigation Company, Ontario.	22,400 00
57-8 " 4	*51,200 00	28	Tilsonburg, Lake Erie and Pacific Ry., Ontario.....	117,431 48
56 " 2	*11,200 00	29	St. Stephen and Milltown Ry., N.B.....	14,848 00
57-8 " 4	*38,400 00	30	Gulf Shore Railway Company, N.B.....	- 53,699 20
57-8 " 4	9,000 00	31	Cap de la Magdeleine Railway, Quebec.....	7,424 00
56 " 2	32,000 00	32	Ontario, Belmont and Northern Ry. Company, Ont..	30,720 00
*	-	33	Coast line of N.S., now Halifax and Yarmouth Ry...	160,000 00
*	-	34	Ottawa and New York Railway Company, Ontario.	262,384 00
			Carried forward.....	15,446,292 38

been entered into and payments made up to March 31, 1912—*Continued.*

Payments.							Total March 31, 1912.	Number.
1905–06.	1906–07.	1907–08.	1908–09.	1909–10.	1910–11.	1911–12.		
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
86,016 00	103,312 00	385,981 09	55,449 60	164,172 29	273,929 12	113,988 03	11,460,683 69	
							96,000 00	1
							375,000 00	2
							57,600 00	3
							271,200 00	4
							192,000 00	5
							44,800 00	6
		4,243 20					414,931 20	7
							226,012 54	8
							361,270 00	9
							152,800 00	10
							163,200 00	11
							134,016 0	12
							88,800 00	13
							32,800 00	14
45.764 50		24,123 00					192,942 50	15
							149,481 60	16
							39,840 00	17
							188,816 00	18
							23,712 00	19
							779,712 00	20
							167,440 00	21
							96,000 00	22
							39,744 00	23
							80,000 00	24
							117,760 00	25
							87,808 00	26
							22,400 00	27
							117,431 48	28
							14,848 00	29
							53,699 20	30
							7,424 00	31
							30,720 00	32
							160,000 00	33
							262,384 00	34
131,780 50	103,312 00	414,352 29	55,449 60	164,172 29	273,929 12	113,988 03	16,703,276 21	

STATEMENT showing subsidies voted for Railways as to which contracts have

SUBSIDIES VOTED.		Number.	RAILWAYS.	July 1, 1883, to June 30, 1905.
Authority.	Amount.			
	$ c.			$ c.
			Brought forward	15,446,292 38
60–61 Vic., c. 5	3,630,000 00	1	Canadian Pacific Ry Co., B.-C. (Crow's Nest Pass)	3,404,720 00
60–61 " 4	500,000 00	2	Grand Trunk Ry Co. 'Victoria Jubilee Bridge,' Que	500,000 00
*7–8 Ed. VII, 63		3	International Ry. of New Brunswick, formerly Restigouche and Western Ry. Co.	77,138 00
		4	East Richelieu Railway Co., Quebec	69,952 00
7–8 Ed. VII, 63		5	South Shore Ry. (Quebec, Montreal and Southern)	203,240 81
		6	Pembroke Southern Railway, Ontario	64.000 00
		7	Massawippi Valley Railway Co., Quebec	5,376 00
		8	Inverness and Richmond Co, N.S., now Inverness Ry. and Coal Co	368,545 97
		9	Canadian Northern Railway Co., Ontario, Manitoba and N.W.T	1,909,132 00
		10	Canadian Pacific Railway Co. (Pipestone Branch)	160,000 00
6–7 Ed. VII, 40.		11	Central Ontario Railway Co., Ontario	67,200 00
		12	Midland Railway Co., N.S	362,200 30
62–3 Vic., c. 7 63–4 " 8	1,000,000 00	13	Quebec Bridge Co., Quebec	374,353 33
		14	St. Mary River Railway Co., N.W.T	148,094 00
60–1 Vic., c. 4 63–4 " 2	212,500 00	15	Pontiac and Pacific and Ottawa and Gatineau Ry., Co. (Interprovincial Bridge over Ottawa River)	212.500 00
1 Ed. VII, c. 7		16	Atlantic and Lake Superior Ry., Quebec	146,490 84
1 " 7		17	Montreal and Province Line Railway, Quebec	58,560 00
62–3 Vic., c. 7		18	York and Carleton Railway, N.-B	18,336 00
62–3 " 7 63–4 " 8 1 Ed. VII, c. 7		19	Algoma Central and Hudson Bay Railway, Ontario	924,976 00
		20	Cape Breton Extension Railway, N.S	182,400 00
		21	Can. Pac. Ry. Co. (Kootenay and Arrowhead Br'ch)	64,790 00
		22	" (Selkirk Branch)	83,200 00
		23	" (Dyment Branch)	22,336 00
		24	" (Waskada Branch)	64,000 00
9–10 Ed. VII, 51		25	Manitoulin and North Shore Ry. Co., Ont	32,000 00
		26	Bay of Quinté Railway, Ont	69,120 00
		27	Bruce Mines and Algoma Railway, Ont	53,920 00
		28	Maganetawan River Railway Co., Ont	3,552 00
		29	Canadian Northern Quebec Ry., formerly Chateauguay and Northern Ry., Quebec	191,595 00
		30	Canadian Pacific Ry. Co., (Pheasant Hill Branch)	435,200 00
		31	Halifax and Southwestern Railway Co., N.S	477,264 00
		32	Northern Colonisation Railway Co., Quebec	58,384 00
		33	New Brunswick Coal and Railway Co., N.-B	48,000 00
		34	Schomberg and Aurora Railway Co., Ont	46,144 00
		35	Lindsay, Bobcaygeon and Pontypool Ry. Co., Ont	185,173 06
		36	Middleton and Victoria Beach Ry. Co., N.S	47,789 00
		37	Beersville Coal and Ry. Co., N.B., now North Shore Ry	20.736 00
Ed. VII, c. 57		38	Nicola, Kamloops and Similkameen Coal and Ry. Co.	
4 " 34		39	Canadian Pacific Ry., (Staynerville Branch)	
6 " 43		40	Klondike Mines Railway	
6 " 43		41	Kettle River Valley Ry. Co., B.C	
6 " 43		42	Colchester Coal and Ry. Co., N.S	
3 " 57		43	Minudie Coal Co., N.S	
6 " 43		44	Atlantic, Quebec and Western Ry. Co., Quebec	
9–10 " 51		45	Napierville Junction Ry. Co., Quebec	
6 " 43		46	Edmonton, Yukon and Pac. Ry. Co., Alberta	
6–7 " 40		47	Canadian Northern Ontario Ry. Co., formerly James Bay Ry. Co., Ontario	
6–7 " 40				
7–8 " 63				
			Carried forward	26,606,710 69

† Of this amount, $16,164.43 were in connection with subsidy to Montreal and Sorel Railway.

been entered into and payments made up to March 31, 1912—*Continued.*

Payments.								
1905–1906.	1906–1907.	1907–1908.	1908–1909.	1909–1910.	1910–1911.	1911–1912.	Total March 31 1912.	Number.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts	
131,780 50	103,312 00	414,352 29	55,449 60	164,172 29	273,929 12	113,988 03	16,703,276 21	
							3.404,720 00	1
							500,000 00	2
50,070 07	51,200 00		189,849 60	187,494 40	169,536 00		725.288 07	3
							69,952 00	4
			43,414 55	184,320 00	60,000 00	23,835 70	†514,811 06	5
							64,000 00	6
							5,376 00	7
							368,545 97	8
							1,909,132 00	9
							160,000 00	10
		76.861 36	35,404 64		24,601 32	826 17	204,893 49	11
	4,967 70	31,892 40					399,060 40	12
							374,353 33	13
							148,094 00	14
							212,500 00	15
	‡*1,521 82*						a144.969 02	16
							58,560 00	17
		14,560 00					32,896 00	18
						133,584 00	1,058,560 00	19
				14,400 00			196,800 00	20
89,076 00							153,866 00	21
							83,200 00	22
							22,736 00	23
							64,000 00	24
					38,638 72		100,638 72	25
	72,602 45						141,722 45	26
							53,920 00	27
							3,552 00	28
116,000 00	84,224 75						391,819 75	29
							435,200 00	30
176,512 00	268,107 20	316,567 73					1,238,450 93	31
75,376 00			68,320 00	153,120 00			355,200 00	32
							48,000 00	33
							46,144 00	34
							185,173 06	35
50,303 80	27,667 20						125,760 00	36
							20,736 00	37
110,592 00		190,208 00					300,800 00	38
	9,600 00	3,424 00					13,024 00	39
	96,000 00	101,184 00					197,184 00	40
		97,771 52				148,800 00	246,571 52	41
		12,800 00					12,800 00	42
		18,544 00					18,544 00	43
		64,000 00	92,672 00	208,896 00	31,334 40	91,279 60	488,182 00	44
		173,440 00					173,440 00	45
		91,200 00					91,200 00	46
651,264 00	420,608 00	244,224 00	556,864 00	250,982 40	116,889 60		2,240,832 00	47
1,450,974 37	1,136,767 48	1,851,029 30	1,011,974 39	1,163,385 09	744,929 16	512,313 50	34,508,083 98	

a Amount actually paid after deductions amounting to $1,521.82 made in 1905-06 (being for refunds, &c., from the total of $146,490.84, previously reported, for which cheques had issued.)

‡ Reimbursement of amounts for claims still unpaid and others in duplicate.

STATEMENT showing subsidies voted for Railways as to which contracts

SUBSIDIES VOTED.					July 1, 1883 to June 30, 1905.
Authority.		Amount.	Number	RAILWAYS.	
		$ cts.			$ cts.
				Brought forward	26,606,710 69
7-8 Ed. VII, c.	63		1	Maritime Coal and Ry. Co.	
7-8 "	63		2	St. Marys and Western Ontario Ry. Co.	
7-8 "	63		3	North Shore Ry. Co. formerly Beersville Coal and Ry. Co.	
7-8 "	63		4	St. Maurice Valley Ry. Co.—Three Rivers to St. Maurice	
7-8 "	63		5	Grand Trunk Pacific Ry. Co	
6 "	43		6	Canadian Pacific Ry. Co., Teulon to Icelandic River.	
7-8 "	63		7	Canadian Pacific Ry. Co., Moosejaw northwesterly.	
7-8 "	63		8	Canadian and Gulf Terminal Ry. Co.	
6-7 "	40		9	Liverpool and Milltown Ry. 5 miles	
7-8 "	63		10	Thessalon and Northern Ry Co.	
7-8 "	34		11	Vancouver and Lulu Island Ry. Co.	
7-8 "	51		12	Quebec and Saguenay Ry. Co.	
7-8 "	63		13	Canadian Pacific Ry. Winnipeg to Gimli.	
				Total	26,606,710 69
37 Vic., ch.	14	186,600 annually for 20 years.	14	Atlantic and Northwestern Railway	2,985,600 00
46 "	2	1,525,250 00	15	Canada Central Railway	1,525,250 00
47 "	8				
48-9 "	58	1,500,000 00	16	Canadian Pacific extension	1,500,000 00
				Totals	32,617,560 69

* 60-61 Victoria, Cap. 4, 62-63 Victoria, Cap. 7, 63-64 Victoria, Cap. 8, 1 Edward VII, Cap. 7, 40, and 7-8 Edward VII, Cap. 63, 8-9 Edward VII, Cap. 35, 9-10 Edward VII, Cap. 51, authorize a further sum of fifty per cent on so much of the average cost of the mileage subsidized as is in excess

DEPARTMENT OF RAILWAY AND CANALS,
OTTAWA, August 1, 1912.

have been entered into and Payments made up to March 31, 1912—*Concluded.*

Payments.								
1905–1906.	1906–1907.	1907–1908.	1908–1909.	1909–1910.	1910–1911.	1911-1912.	Total March 31, 1912.	Number.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
1,450,974 37	1,136,767 48	1,851,029 30	1,041,974 39	1,163,385 09	744,929 16	512,313 50	34,508,083 98	
.....	.....	.....	3,200 00	.....	.....	.....	3,200 00	1
.....	.....	.....	67,344 00	.....	.....	365 00	67,999 00	2
.....	.....	.....	6,880 00	.....	.....	.....	6,880 00	3
.....	.....	.....	112,640 00	.....	60,480 00	.....	173,120 00	4
.....	.....	.....	367,249 00	550,551 96	302,679 04	.....	1,220,480 00	5
.....	.....	.....	.....	30,800 00	.....	.....	30,800 00	6
.....	.....	.....	.....	303,360 00	.....	78,432 00	381,792 00	7
.....	.....	.....	.....	.....	144,803 84	65,249 75	210,053 59	8
.....	.....	.....	.....	.....	32,000 00	.....	32,000 00	9
.....	.....	.....	.....	.....	.....	6,112 00	6,112 00	10
.....	.....	.....	.....	.....	.....	61,760 00	61,760 00	11
.....	.....	.....	.....	.....	.....	104,992 00	104,992 00	12
.....	.....	.....	.....	.....	.....	30,176 00	30,176 00	13
1,450,974 37	1,136,767 48	1,851,029 30	1,599,287 39	2,048,097 05	1,284,892 04	859,400 25	36,837,158 57	
186,600 00	186,600 00	186,600 00	186,600 00	.....	.....	.....	3,732,000 00	14
.....	.....	.....	.....	.....	.....	.....	1,525,250 00	15
.....	.....	.....	.....	.....	.....	.....	1,500,000 00	16
1,637,574 37	1,323,367 48	2,037,629 30	1,785,887 39	2,048,097 05	1,284,892 04	859,400 25	43,594,408 57	

3 Edward VII, Cap. 57, 4 Edward VII, Cap. 34, 6 Edward VII, Cap. 43, 6-7 Edward VII, Cap. $3,200 per mile subsidy if the cost do not average more than $15,000 per mile, if over that amount, of $15,000, per mile, such subsidy not exceeding in the whole the sum of $6,400 per mile.

W. C. LITTLE,
Accountant.

PART II

STATEMENTS

OF THE

DEPARTMENTAL SOLICITOR

FOR THE YEAR 1911-12

SHOWING

(1) Guarantee agreements.

(2) Money subsidy agreements.

(3) Contracts entered into during the year.

(4) Leases, of water-powers and properties granted.

(5) Property conveyed to the Crown and lands conveyed by the Crown.

(6) Damages released.

GUARANTEE AGREEMENTS for the construction of Railways

No. of agreement.	Date of signature.	Railway Company.	Line of Railway.	Authority for execution.	
				Act of Parliament.	Order in Council.
	1911.				
19204	Sept. 2...	The Canadian Northern Alberta Railway Company.	Commencing at a point at or near St. Albert and running in a generally westerly direction to the coal areas at or near Brazeau River and the head waters of the McLeod River.	Canada 1909–10, Cap. 6.	Aug. 29, 1911
19239	Oct. 3....	The Canadian Northern Ontario Railway Company.	From the City of Montreal in the Province of Quebec, to the City of Port Arthur in the Province of Ontario including the mileage of the line (lying between the said points) already in part constructed by the Company and by the Canadian Northern Quebec Ry. Co., &c., &c., &c.	I and II. George V. Cap. 6.	Oct. 2, 1911.

entered into during the Fiscal Year ended March 31st, 1912.

Amount of Guarantee.	Number of miles subsidized.	Maximum grade feet per mile.	Radius of curvature not less than.	Width of clearing each side.	Width of Cutting.	Embankment.	Steel rail lbs. per lineal yard.	Date for Completion.
		Feet.	Feet.	Feet.	Fect.	Feet.	Lbs.	
On the principal and interest on securities to extent of $13,000 per mile for first 50 miles and $25,000 per mile, for the remainder of the line.	150	26.4	1433	50	20	15	80	Sept. 2, 1913.
On the principal and interest on securites to extent of $35,000 per mile.	1050	26.40† 31.68‡	573	50	20	15	80	Time prescribed by law.

† Against east-bound traffic.

‡ Against west-bound traffic.

H. F. ALWARD,
Departmental Solicitor.

SUBSIDY AGREEMENTS for the construction of Railways

No. of Contract.	Date of Signature.	Railway Company.	Line of Railway or Work Subsidized.	Authority for Execution.	
				Act of Parliament.	Order in Council.
	1910.				1911.
19037	April 25..	Quebec and Lake St. John Railway Co.	*(a)* From Valcartier Station to St-Catherine, 3.8 miles, *(b)* from Valcartier Station towards Gosford, 5.5 miles.	Can., 1908, c. 63.	Feb. 22.....
(*a*) 19258	Oct. 21....	Algoma Central and Hudson Bay Ry. Co.	From Sault Ste. Marie to point on C. P. R., between White River and Dalton stations.	Can., 1910, c. 51.	July 19 and Oct 3.
(*b*) 19259	Oct. 21....	" "	From Michipicoten Harbour, Lake Superior, toward main line of C.P.R.	Can., 1910, c. 51.	Sept. 11 ....
	1912.				
(*c*) 19367	Feb. 2....	Quebec and Saguenay Ry. Co.	From St. Joachim towards Seven Islands, including branches to Murray Bay and Baie St. Paul.	Can., 1910, c. 51.	Jan. 30 and March 31.
	1911.				
19282	Nov. 28...	Orford Mountain Ry. Co.	From Mansonville to the International Boundary, 3.12 miles.	Can., 1907, c. 40.	Oct. 31.....

(a) Cancels and supersedes agreements Nos. 14316, Sept. 28, 1911; 14712, October 15, 1912: and 14413, Feb. 5, 1902, as to extension of 25 miles from Sault Ste. Marie towards Michipicoten River and Harbour. Authority No. 19307 for erection of trestles attached.
Varied by supplemental agreement No. 19362, January 23, 1912.
(b) Cancels and supersedes subsidy agreement No. 14413, dated February 5, 1912.
(c) Superseded, in part, by No. 19560, as to line of railway therein.

SESSIONAL PAPER No. 20

entered into during the Fiscal Year ended March 31, 1912.

Amount of Subsidy.		Number of Miles Subsidized.	Maximum Grade Feet per Mile.	Radius of Curvature not less than	Width of Clearing each Side.	Width of Cutting.	Embankment.	Steel Rails, lbs. per lineal yard.	Date of Completion.
Per Mile.	Not exceeding								
$	$		Feet.	Feet.	Feet.	Feet.	Feet.	Lbs.	
3,200	6,400	9.3	(*a*)43.8 (*b*) 52.80	5,730 717	50	20	15	56	Aug. 1, 1911.
3,200	6,400	200	106	478	50	20	15	56	Dec. 1, 1913.
3,200	6,400	25	106	478	50	20	15	56	Dec. 1, 1913.
3,200	6,400	170	66	573	50	20	15	56	Aug. 1, 1914.
3,200	6,400	3.12	105.6	819.2	50	20	15	56	June 1, 1911.

H. F. ALWARD,
Departmental Solicitor.

Subsidy agreements for the construction of Bridges entered into during the Fiscal Year ended March 31, 1912.

Number of Contract.	Date of Signature.	Company.	Work Subsidized.	Order in Council.	Amount of Subsidy.
	1912			1911	$
19345	Jan. 16.....	The Corporation of the the City of Ottawa.	In aid of the construction of a high level bridge and viaduct at Bank Street Crossing, Ottawa.	Nov. 21.....	80,000

H. F. ALWARD,
Departmental Solicitor.

CONTRACTS entered into during the Fiscal Year ended March 31, 1912.

INTERCOLONIAL RAILWAY.

Number of Contract.	Date of Signature.	Contractors.	Description.
	1911.		
19021	April 13..	Wm. P. McNeil & Co. Ltd.....	Delivery of 3 railway bridges.
19056	May 5..	Canadian Car & Foundry Co. Ltd..	Delivery of 15 Tank Cars.
19101	" 22..	" " ..	Delivery of 50 30-ton steel underframe box cars
19108	June 2..	" " ..	Delivery of 21 Hart-Otis dump coal cars of 50 tons capacity.
19136	" 17..	Bates and Flood.....	Erection of brick and stone passenger station at Campbellton, N.B.
19141	" 19..	Dominion Bridge Co. Ltd.	Delivery of 3 steel bridges, Nelson Under-crossing, Rivière du Sud and Etchemin.
19142	" 30..	The Hamilton Bridge Works Co. Ltd.	Delivery of a steel bridge, No. J.-42 Bagot Tank.
19143	July 3..	Canadian Car & Foundry Co. Ltd..	Delivery of 2 Vestibule First-class cars.
19162	" 12..	" " ..	Delivery of 3 Vestibule Colonist Sleeping cars.
19163	" 12.	The Canadian Vacuum Cleaner Co.	Supply and installation of a Vacuum Car Cleaning Plant in yard at Halifax, N.S.
19167	June 15..	The Preston Car & Coach Co. Ltd..	Delivery of 3 Vestibule First-class Day Coaches.
19173	Aug. 8..	Alfred Leofred.....	Supply of water at Chaudiere Junction, &c.
19187	" 17..	Wm. P. McNeil & Co. Ltd.....	Construct and deliver one 37′ Deck Plate Girder Span at New Glasgow, N.S.
19190	" 18..	Canadian Car & Foundry Co. Ltd..	Delivery of 1 Refrigerator Car.
19191	" 17..	Rhodes Curry Company, Ltd	Erection of addition to General Office Building at Moncton, N.B.
19203	Sept. 2..	Frank W. Wilson.	Erection and completion of a brick and stone Passenger Station at Mulgrave, N.S.
19211	Aug. 26..	The Canadian Locomotive Co. Ltd.	Delivery of 2 Pacific Type Passenger Locomotives and 3 Ten-wheel Passenger Locomotives.
19224	Sept. 15..	Geo. St. Pierre & Co..	Erection of Standard Sand House at Ste. Flavie, Que.
19231	" 25..	Nova Scotia Car Works, Ltd.....	Delivery of 2 Postal Cars.
19232	" 25..	Canadian Car & Foundry Co. Ltd..	Delivery of 20, 80,000 lbs. Steel Underframe Flat Cars.
19233	Aug. 25..	J. F. Ryan.	Erection of Station building at Fredericton, N.B.
19234	Sept. 25..	Nova Scotia Car Works, Ltd	Delivery of 2 Stock Cars.
19238	" 29..	Canadian Express Company.....	Rights to carry on the business of an Express Company.
19241	" 25..	The Nova Scotia Construction Co. Ltd.	Construct Reinforced Cement Concrete Pier and a shed at Deep Water Terminus of I. C.R. at Halifax, N.S.
19242	Oct. 3..	Falconer and McDonald.	Erection of Freight Shed on Quay Wall at Halifax, N.S.
19244	" 2..	The Dominion Iron & Steel Co. Ltd.	Delivery of 7,000 tons of steel rails.
19249	Sept. 29..	The Hamilton Bridge Works Co. Ltd.	Supply and deliver 3 steel plate girder spans for undercrossing at Chaudiere Junction, Que.
19255	Oct. 23..	Canadian Car & Foundry Co. Ltd..	Delivery of 2 Baggage cars.
19256	" 23..	" " ..	Delivery of 25 Hart-Otis steel dump coal cars.
19257	" 21..	Town of Truro	Supply water.
19262	" 26..	Canadian Car & Foundry Co. Ltd..	Delivery of 230 Standard 60,000 lbs. steel framed box cars.
19263	" 26..	Falconer & McDonald.....	Erection of addition to Engine House and enlarging Power House at Stellarton, N.S.
19271	Sept. 19..	The Salisbury & Albert Ry. Co....	*Re* sale of rails, etc., to Company and taking over or leasing of line of railway of the Company.
19273	Nov. 17..	The Rathbun Company.	Delivery of 30 Standard 60,000 lbs. box cars.

CONTRACTS entered into during the Fiscal Year ended March 31, 1912—*Continued.*

INTERCOLONIAL RAILWAY—*Concluded.*

Number of Contract.	Date of Signature.	Contractors.	Description.
	1911.		
19274	Nov. 17..	Dan. J. Cameron..... ...	Erection of a waiting-room and dwelling apartments at Lourdes, N.S.
19276	" 17..	Nova Scotia Car Works, Ltd.....	Delivery of 50 Standard 80,000 lbs. platform cars.
19283	" 28..	The Hamilton Bridge Works Co. Ltd.	Delivery of steel girder bridge at St. Fabien, Que.
19301	Dec. 4 .	Wm. P. McNeil & Co. Ltd.....	Delivery of 5 sets steel deck girders for Moncton subway.
19326	" 19..	The Preston Car & Coach Co. Ltd..	Delivery of 5 Vestibule First-class Day Coaches.
	1912.		
19352	Jan. 19..	Otis-Fenson Elevator Co. Ltd.....	Supply and erection complete of one Electric Passenger Elevator for General Office Building, Moncton, N.B.
19353	" 19..	Wm. P. McNeil & Co. Ltd.....	Delivery of one deck plate girder span at Hopewell, N.S.
19354	" 16..	Central Paving Company.....	For laying of permanent pavement on Station Street, Amherst, N.S.
19372	Feb. 5..	Edward Bradley.....	Handling of coal at Springhill Junction, N.S.
19373	" 8..	Nova Scotia Car Works, Ltd.....	Delivery of 50, 80,000 lbs. steel underframe flat cars.
19396	" 16..	M. P. Davis & J. T. Davis	Branch line of railway from Dartmouth to Deans, N.S.
19405	" 27..	Frank W. Wilson.....	Erect stone passenger station at Truro, N.S.
19407	Mch. 5..	Province of New Brunswick and The St. John & Quebec Railway Co.	For the leasing under terms and conditions specified, of the line of railway, when completed, of the Company between Grand Falls and St. John, N.B.
19411	" 7..	The Dickson Bridge Works Co. Ltd.	Delivery of Steel Highway Bridge for Probert's Crossing, 2 miles west of Londonderry Station, N.S.
19414	" 16.	Wm. P. McNeil & Co. Ltd.... ...	Delivery of 2 sets half-through plate girder spans for subway at Ste. Flavie, Que.

PRINCE EDWARD ISLAND RAILWAY.

	1911		
19365	Oct. 26....	M. F. Shurman Co., Ltd	Erection of freight shed and extension to wharf at Summerside, P. E. I.

HUDSON BAY RAILWAY.

	1911.		
19230	Sept. 25...	J. D. McArthur.....	Construction of section of Hudson Bay Railway from Le Pas to Thicket Portage.

SESSIONAL PAPER No. 20

CONTRACTS entered into during the Fiscal Year ended March 31, 1912—*Continued.*

QUEBEC BRIDGE.

Number of Contract.	Date of Signature.	Contractors.	Description.
	1911.		
19007	April 4..	The St. Lawrence Bridge Co., Ltd.; The Canadian Bridge Co., Ltd and The Dominion Bridge Co., Ltd.	Supplying, making, building and erecting superstructure of railway bridge over the St. Lawrence River, near Quebec.
19206	Sept. 2....	M. P. & J. T. Davis	Modifying contract No. 18113, sub-structure of Quebec Bridge.
	1912.		
19346	Jan. 19...	R. W. Mayer.....	For the sale by His Majesty of certain unused manufa tured steel, originally intended for use in the construction of the Quebec bridge.

BEAUHARNOIS CANAL.

	1911.		
19164	July 8....	Alfred Cossette.....	Crushed stone for macadamizing road on Hungry Bay Dyke.

CORNWALL CANAL.

	1911.		
19058	May 5...	Canada Cement Co., Ltd.....	Delivery of 6,650 bbls. of Portland cement.
19104	May 30...	Fallon Brothers.....	Improving Upper entrance to lock No. 19.
19196	Aug. 18...	J. J. Fallon	Erection of machine shop at Cornwall.

CHAMBLY CANAL.

	1911.		
19060	May 5...	Canada Cement Co., Ltd.....	Delivery of 1,200 bbls. of Portland cement.
19223	Aug. 22...	David Brault.....	Macadamizing portion of road along west side of the canal.

FARRAN'S POINT CANAL.

	1911.		
19058	May 5...	Canada Cement Co., Ltd.	Delivery of 250 bbls. of Portland cement,
19107	May 22...	The Randolph MacDonald Co., Ltd.	Improve lower entrance to canal.

GALOPS CANAL.

	1911.		
19145	June 30 ..	The Randolph MacDonald Co., Ltd.	Improving upper entrance to lock No. 28.

CONTRACTS entered into during the Fiscal Year ended March 31, 1912—*Continued.*

LACHINE CANAL.

Number of Contract.	Date of Signature.	Contractors.	Description.
	1911.		
19060	May 5...	Canada Cement Co., Ltd.	Deliveryof 23,000 bbls. of Portland cement.
19197	Aug. 19...	Haney, Quinlan & Robertson.....	For concrete walls, paving roads and wharf between locks 1 and 3.
19240	Oct. 5...	" " "	Construct substructure of lift bridge over canal at St. Pierre-aux-Liens (Rockfield).
	1912.		
19395	Feb. 16...	Dominion Bridge Co., Ltd.....	Deliver and erect Strauss Trunnion Bascule Bridge (superstructure) over canal at St. Pierre-aux-Liens (Rockfield) Que.

MURRAY CANAL.

	1911.		
19205	Sept. 9...	W. E. Phin.....	Dredging canal.

RAPIDE PLAT CANAL.

	1911.		
19058	May 5....	Canada Cement Co.	200 bbls. of Portland cement.
19146	July 3 ...	Fallon Brothers.....	Dredging canal.
19202	Sept. 2....	Roger Miller & Sons..... ..	Improvement of lower entrance to lock No. 24.

RIDEAU CANAL.

	1911.		
19039	April 25..	Cameron & Co., Ltd.....	Supply of British Columbia or 'Douglas' Fir dimension timber for 1911-12.
19040	April 25..	Costello & Crowe	Carboning and regulating arc lamps on electric light line on canal from foot of locks to Laurier bridge, and patrolling between said points.
19062	May 5....	Canada Cement Co., Ltd.....	Delivery of 1,500 bbls. of Portland cement.

SOULANGES CANAL.

	1911.		
19198	Aug. 26...	Haney, Quinlan & Robertson.....	Protection works at upper entrance of canal.
19060	May 5...	Canada Cement Co., Ltd.....	Delivery of 17,250 bbls. of Portland cement.

SAULT STE. MARIE CANAL.

	1911.		
19059	May 5...	Canada Cement Co., Ltd.....	Delivery of 200 bbls. of Portland cement.
19100	May 20...	Canada Foundry Co., Ltd.....	Repairs to movable dam of canal.
19166	July 20...	John F. Boyd	Construction of extension to north mooring pier.

SESSIONAL PAPER No. 20

CONTRACTS entered into during the Fiscal Year ended March 31, 1912—*Concluded*.

ST. OURS LOCK.

Number of Contract.	Date of Signature.	Contractors.	Description.
	1911.		
19060	May 5..	Canada Cement Co., Ltd.....	Delivery of 450 barrels of Portland Cement.

ST. PETER'S CANAL.

	1911		
19275	Nov. 17..	W. H. Weller....	Construct new lock and entrance at southern or Atlantic end of Canal.

TRENT CANAL.

	1911		
19009	April 6..	Larkin & Sangster	Modification of Contract No. 17042 *re* Dam No. 1
19012	April 6..	William Hamilton Co., Ltd.....	Supply and erection of 13 cylindrical valves for locks on Canal.
19022	April 5..	Dominion Bridge Company, Ltd...	Delivery and erection of 7 steel stop logs and bridges.
19029	April 13..	William Hamilton Co., Ltd.....	Delivery of 4 gains for emergency stop logs on sites of locks Nos. 12 and 17.
19038	April 25..	Alfred Rogers, Limited..	Delivery of 79,000 barrels of cement.
19057	May 5..	Canada Cement Company, Ltd....	Delivery of 75,000 barrels of cement.
19105	May 30..	Brown & Aylmer.....	Modification of Contract No. 16779, *re* section No. 5 Ontario-Rice Lake Division.
19144	June 30..	The Hamilton Bridge Works Co., Ld	Erection of Highway Strauss Bascule Bridge over canal at Campbellford, Ont.
19172	Aug. 4..	The Dickson Bridge Works Co., Ld	Erection of steel highway draw bridge at Paper Mills, over upper end of lock No. 12.
	1912.		
19360	Jan. 30.	The York Construction Co.....	For additional work, section No. 2, Holland River Division.

WELLAND CANAL.

	1911.		
19061	May 5..	Canada Cement Co., Ltd.....	Delivery of 3,000 barrels of Portland Cement.
19174	Aug. 8.	M. J. Hogan..	Improvements to Port Colborne entrance to canal, including excavation in entrance channel and extensien of docking west of Government elevator.
19243	Sept. 29..	R. Weddell & Company	Dredging to form turning basin near Thorold, Ont.

H. F. ALWARD,
Departmental Solicitor.

Water Power and other Public Property leased by the Department of

INTERCOLONIAL

No. of Lease.	Date of Signature.	Lessee.	Lands or rights demised.
	1911.		
19017	April 13	J. D. Volckman.. ..	Priv. to lay and maintain a 6-inch terra cotta sewer pipe across right of way and under tracks of Indiantown branch of Intercolonial Railway 1.51 miles east of Millerton station, N.B..
19045	" 25	James R. Porter.....	5,000 sq. ft. of land at Pictou Landing, Co. of Pictou, N.S. ....
19054	May 1	William R. Wakely.....	Land at Tufts Cove, N.S..... .....
19103	" 22	Town of Fraserville.....	Land in Town of Fraserville..... .. ..
19147	June 26	Canada Railway News Co., Ltd.	Priv. to sell newspapers etc., on all passenger trains, and at certain stations. ....
19158	July 3	Pantaleon Ouellet.	Land at St. Paschal Station..... ... .
19177	Aug. 8	John J. McLeod.....	Land at Sydney Mines, C.B..... ... .
19184	" 17	Simeon H. White.....	Land at Sussex, Kings Co., N.B.... ....
19185	" 17	Clarence H. Chapman...	Land at Dorchester, N.B..... .....
19186	" 17	Arthur S. Comeau.....	Land at St. Leonard Jct.....
19210	Sept. 2	Levi Thompson.....	Land at Apohaqui, Kings Co.....
19222	" 2	John C. Simmonds.....	Priv. to lay and maintain a telephone wire across lands and under tracks of I.C.R. at Sutherland River, N.S.... .....
19225	" 15	Thomas H. Brown.....	Land at Sussex, N.B ....
19226	" 15	Henry J. B. Woods as Postmaster General of Newfoundland.	Land at North Sydney..... .....
19227	" 15	The Dominion Iron & Steel Co., Ltd.	Priv. to erect and maintain a power transmission line along right of way from Prince Street to Sydney River..... .....
19235	" 25	City of Sydney.	Land at Sydney, N.S..... . ...
19245	" 29	Mills Eveleigh Ltd.....	Land at Sussex, N.B ....
19250	" 29	TheNew Brunswick Telephone Co., Ltd.	Priv. to lay and maintain Two 3-inch iron conduits for telephone cables on the Wall Street Bridge over I.C.R. at St. John...
19252	" 29	The Sackville Concrete, Ltd.	Land at Sackville, N.B. and priv. to lay and maintain a 2-inch iron pipe.... ....
19260	Oct. 21	Chas. B. McMullin	Land at Truro, N.S ....
19261	" 21	Department of Public Works of Canada.....	Priv. to erect and maintain a telegraph line across right of way at certain public crossings between Canal Narrows and Georges River, Cape Breton.... .. . .
19271	Sept. 19	The Salisbury and Albert Ry. Co.	Taking over or leasing of line of railway of the Company.....
19277	Nov. 17	The Maritime Coal Railway & Power Co., Ltd.	Priv. to lay & maintain a 2‴ pipe across lands & under tracks of I.O.R. at Maccan, N.S..... .....
19306	Dec. 7	David M. Lawson.....	Land at Apohaqui, N.B ....
	1912		
19374	Feb. 5	City of Halifax....	Priv. to lay and maintain a sewer across yard at Richmond....
19375	" 5	Allison R. Chambers...	Lot No. 2, land at Pictou Landing... ....
19376	" 8	John D. Creaghan.....	Priv. to let cattle pass through 6 ft. arch culvert situated 2.59 miles north of Newcastle Station.....
19377	" 8	Willis Dunfield..... . .	Land at Anagance, Kings Co..... ....
19400	" 27	The Ristigouche Salmon Club	Priv. to erect and maintain a telephone wire across right of way and over tracks of I.C.R. at Matapedia Station, Que.....
19401	" 27	The Canadian Oil Companies, Ltd.	Priv to lay and maintain a 3-inch cast iron pipe across lands and under tracks of I.C R.... .....
19408	March 4	Town of Stellarton	The right to lay etc., an 8-inch cast iron water pipe under tracks and right of way of Ry. at Asphalt Crossing on Acadia Ave., Stellarton, N.S ....
19496	" 21	The Moncton Tramways, Electricity & Gas Co., Ltd.	Priv. to lay and maintain pipes for conveyance of natural gas under tracks of I.C.R. at certain street crossings in the City of Moncton.....

SESSIONAL PAPER No. 20

Railways and Canals during the Fiscal Year ended March 31, 1912.

RAILWAY.

Area.	Term.	Commencement of term.	Terms of Payment.		
			Annual rental.	Due each year.	First instalment due.
			$		
....	During pleasure. . . .	Dec. 1, 1910.	1 00	Dec. 1....	Dec. 1, 1910.
5,000 sq. ft.....	"	Jan. 1, 1911.	5 00	Jan 1....	Jan. 1, 1911
13,485 sq. ft.....	"	" 1, 1911.	5 00	" 1....	" 1, 1911
0·342 ac.....	"	March 1, 1911	1 00	March 1....	March 1, 1911.
.....	Five years.....	May 1, 1911.	9,000.00 for 1st 2 yrs. and 10,000 for last 3 yrs.	May 1....	May 1, 1911
457 sq. ft.....	During pleasure. . . .	" 1, 1911.	5 00	" 1....	" 1, 1911.
7,700 sq. ft.....	" . .	" 1, 1911.	10 00	" 1....	" 1, 1911
2,800 sq. ft.....	"	June 1, 1911.	5 00	June 1....	June 1, 1911.
560 sq. ft.....	"	May 1, 1911.	5 00	May 1....	May 1, 1911.
5,000 sq. ft.	"	Jan. 1, 1911	5 00	Jan. 1...	Jan. 1, 1911.
320 sq. ft...	"	July 1, 1911.	1 00	July 1....	July 1, 1911.
....	"	" 1, 1911.	1 00	" 1....	" 1, 1911
3,750 sq. ft.	"	June 1, 1911.	5 00	June 1....	June 1, 1911.
320 sq. ft.....	"	April 1, 1911.	1 00	April 1....	April 1, 1911
....	21 years renewable.....	" 1, 1911.	1 00 per pole per annum.	" 1...	" 1, 1911.
12,005 sq. ft.....	During pleasure.....	Jan. 1, 1911.	1 00	Jan. 1....	Jan. 1, 1911.
5,500 sq. ft.....	"	June 1, 1911.	5 00	June 1....	June 1, 1911
.....	"	July 1, 1911.	1 00	July 1 ...	July 1, 1911.
0·27 ac.....	"	" 1, 1911.	5 00	" 1....	" 1, 1911.
1,500 sq. ft.....	"	" 1, 1911.	5 00	" 1....	" 1, 1911.
....	"	April 1, 1911.	1 00	April 1 ...	April 1, 1911.
....		.....	....	... .	
.....	During pleasure.....	Sept. 1, 1911.	1 00	Sept. 1 ...	Sept. 1, 1911.
320 sq. ft	"	June 1, 1911.	1 00	June 1....	June 1, 1911
....	"	July 1, 1911.	1 00	July 1.. .	July 1, 1911.
5,000 sq. ft.....	"	" 1, 1911.	5 00	" 1....	" 1, 1911.
.. ..	"	Oct. 1, 1911.	1 00	Oct. 1 ...	Oct. 1, 1911.
0·52 ac.....	"	Sept. 30, 1911.	5 00	Sept. 30...	Sept. 30, 1911
....	"	" 1, 1911.	1 00	" 1....	" 1, 1911.
.....	"	Oct. 1, 1911.	1 00	Oct. 1....	Oct. 1, 1911.
....	"	" 1, 1911.	1 00	" 1....	" 1, 1911.
.....	"	April 1, 1912.	1 00	April 1....	April 1, 1912.

WATER POWER and other Public Property leased by the Department of

PRINCE EDWARD

No. of Lease.	Date of Signature.	Lessee.	Lands or Rights demised.
	1911.		
19212	Sept. 2	P. T. Power	Land at Bear River, P.E.I
19237	Aug. 23	The Imperial Oil Co. Ltd.	The right and privilege to lay and maintain a 6-inch pipe line from railway wharf at Charlottetown to Company's storage tank.

LACHINE

	1911		
19018	April 13	The Fenlin Leather Co.	Privilege to lay and maintain a 3-inch water pipe from N. bank of canal to Cad. lot No. 3601, par. of Montreal; and draw water therethrough
19044	" 11	Marx & Rawolle of Canada, Ltd.	Privilege to lay and maintain a 6-inch iron water pipe from canal to Lessee's mill in town of St. Henri, Par. of Montreal, and to draw water therethrough
19102	May 22	The Montreal Light, Heat and Power Co.	Privilege to erect and maintain an electric transmission line on N. side of canal from a point on collecting drain to C.P.R. Bridge at Lachine, Que
19109	" 31	Paul L. Turgeon	Land forming the S. end of pier between St. Gabriel Basins Nos. 2 and 3, St. Ann's Ward, Montreal
19137	June 12	Capt. L. H. Sicotte	Land forming part of N. wharf of basin 2
A19148	" 7	The St. Lawrence Flour Mils Co., Ltd.	Privilege to draw water from canal through 5-inch pipe
19149	" 15	Dominion Textile Co. Ltd.	Privilege to lay and maintain a 12-in. pipe from canal to Cad. lot 3929 Cote St. Paul, Montreal; and draw water there through.
19150	" 16	Geo. Hall Coal Co.	Land on S.W. corner of Oak street and roadway leading to canal yard on basin No. 2, St. Ann's ward, Montreal
19151	" 17	C. H. Buell	Privilege to erect and maintain a boat house 25 ft. x 12 ft. on river side of long pier forming upper entrance of canal, town of Lachine, Que
19152	" 21	Inland Lines, Ltd.	Land at foot of basin No. 1, N. side of lock No. 1, Montreal
19153	" 30	Moise Brabant	Land on S. side of lock No. 1
B19165	July 20	Montreal Warehousing Co.	Lot No. 1479, St. Ann's Ward, Montreal, west of basin No. 4
c19168	" 15	City of Montreal	Part of Cad. lot No. 327, St. Ann's Ward, Montreal
19182	Aug. 17	City of Montreal	Land between Wellington street and St. Colomban street and between canal bank and St. Patrick street, Montreal
19201	" 21	The Montreal Light, Heat and Power Co.	Privilege to lay and maintain 2 electric cables across and under canal at Rockfield, Que
19213	Sept. 2	Grand Trunk Ry. Co. of Canada.	Privilege to lay and maintain a siding from point west of St. Gabriel locks to premises of the St. Lawrence Flour Mills Co.
D19265	Oct. 19	Grand Trunk Ry. Co. of Canada.	Privilege to lay, maintain and operate a siding 220 feet long on N. bank of canal from main tracks opposite Can. Light and Power Co's terminal station
19266	" 19	Grand Trunk Ry. Co. of Canada.	Pivilege to lay, maintain and operate a siding on N. bank leading from main line into premises of Dominion Flour Mills Co., on Cad. lot No. 3412, St. Henri Ward, Montreal
19269	" 25	Charlotte McAllen, Jas. A. Robertson and Alex. A. Robertson, (Estate of John M. H. Robertson).	Privilege to construct and maintain roadway through canal reserve, lot 1005, parish of Lachine
F19278	" 2	The Dominion Steel Corporation, Limited.	Land on W. side of Wellington Basin, Point St. Charles and privilege of drawing water through 3-inch pipe.
19325	Dec 14	The Montreal Light, Heat and Power Co.	Privilege to erect and maintain a transmission line on N. bank of canal from Cote St. Paul to point opposite works of Dominion Car and Foundry Co.

a Supersedes No. 17313. *b* Supersedes No. 10144. *c* Cancelled and superseded by No. 19553.
d Cancels and supersedes No. 18799. *e* Cancels and supersedes Nos. 11540 and 12433.

SESSIONAL PAPER No. 20

Railways and Canals during the Fiscal Year ended March 31, 1912—*Continued.*

ISLAND RAILWAY.

Area.	Term.	Commencement of Term.	Annual Rental.	Due each Year.	First Instalment Due.
			$ cts.		
650 sq. ft.....	During pleasure.....	June 1, 1911	1 00	June 1....	June 1, 1911
.....	"	" 1, 1911..	1 00	" 1....	" 1, 1911

CANAL.

.. ..	During pleasure.....	March 1, 1911.	60 00	Mar. 1 ...	March 1, 1911
....	"	April 1, 1911.	210 00	April 1....	April 1, 1911
.....	"	Oct. 1, 1908.	131 25	Oct. 1....	Oct. 1, 1911
10,000 sq. ft.....	"	June 1, 1911.	400 00	June 1...	June 1, 1911
1,500 sq. ft.....	"	" 1, 1911.	60 00	" 1..	" 1, 1911
.....	"	April 1, 1911.	150 00	April 1....	April 1, 1911
.....	"	June 1, 1911.	780 00	June 1....	June 1, 1911
400 sq. ft.. ...	"	April 1, 1911.	16 00	April 1....	April 1, 1911
.....	"	" 1, 1911.	5 00	" 1....	" 1, 1911
9,510 sq. ft	"	May 1, 1911.	380 40	May 1....	May 1, 1911
300 sq. ft.....	"	" 1, 1911.	18 00	" 1....	" 1, 1911
....	5 years.....	Jan. 1, 1911.	1,077 24	Jan. 1....	Jan. 1, 1911
6,600 sq. ft.....	21 years renewable. ..	March 1, 1911.	5 00	Mar. 1....	March 1, 1911
2 acres.....	10 years.....	May 1, 1909.	1 00	May 1....	May 1, 1909
.....	During pleasure.	" 1, 1911.	10 00	" 1....	" 1, 1911
.....	"	Sept. 1, 1911.	1 00	Sept. 1....	Sept. 1. 1911
.....	"	" 1, 1911.	35 20	" 1....	" 1, 1911
....	"	July 1. 1911.	25 60	July 1...	July 1, 1911
... .	21 years renewable. . .	June 1. 1911.	17 28	June 1....	June 1, 1911
199,800 sq. ft.....	21 years.....	Aug. 1, 1911.	8,052 00	Aug. 1....	Aug. 1, 1911
.....	During pleasure. ...	Oct. 1, 1911.	25 00	Oct. 1....	Oct. 1,1911

WATER POWER and other Public Property leased by the Department of

LACHINE

No. of Lease.	Date of Signature.	Lessee.	Lands or Right demised.
	1911		
19349	Dec. 6.	J. B. Bonhomme	Land on south side of Canal, St. Gabriel Ward, Montreal
	1912		
19350	Jan. 19.	Montreal Water & Power Co.	Land on south side of Canal west of Atwater Ave., Montreal
r19351	" 2.	Town of Lachine	Land above entrance Lock at Lachine and privilege to lay and maintain pipe lines.
19402	Feb. 27.	"	Privilege to lay and maintain a 12-inch water pipe across Canal reserve 50 feet east of boundary stone No. 209, town of Lachine, Que.
19418	Mar. 18.	R. MacFarlane & Co. Ltd.	Part of wharf frontage between St. Gabriel Basins Nos. 3 and 4, St. Ann's Ward, Montreal.

RIDEAU

	1911.		
19161	July 12.	The Ottawa Terminals Ry. Co.	Four parcels of land on N.E. side of Canal, Ottawa
19207	Sept. 2.	The Canadian Northern Ontario Railway Co.	Privilege to erect and maintain a railway bridge over Canal at Chaffey's Locks on lot 17, Con. 8, T'p. of S. Crosby, Co. of Leeds, Ont., and to operate line of railway thereon.
	1912		
19344	Jan. 16.	The Ottawa Terminals Ry. Co.	Privilege to lay and maintain 2 ten inch pipes through concrete wall on east side of Canal at Central Station, Ottawa.
19345	" 16.	Corporation of the City of Ottawa.	Privilege to erect a bridge over the Canal at Bank Street, Ottawa.
19417	Mar. 18.	John Weir	Land in vicinity of Burritt's Rapids Lock Station, being part of lot No. 5, Con. 1, T'p. of Oxford, Ont.

SOULANGES

	1911		
c19236	Aug. 12.	Joseph Hamel	Cad. Lots Nos. 235 and 240, par. of St. Ignace, Co. of Soulanges, Que.

TRENT

	1911.		
19043	Apr. 25.	William Fry	Parts of lots Nos. 56, 57, 58 and 59 on south side and lots Nos. 57 and 58 on the north side of the Portage Road, T'p. of Eldon, Co. of Victoria, Ont.
19155	July 3.	Charles Fry	Parts of lot No. 55 on south side and lots Nos. 55 and 56 on north side of Portage Road, T'p. of Eldon, Co. of Victoria, Ont.
19176	Aug. 8.	C.P.Ry Co	Right and privilege to lay etc., a swing bridge across Canal and Talbot River in 11th Con. T'p. of Thorah, Co. of Ontario, Ont.
19279	Sept. 30.	The Light, Heat and Power Co. of Lindsay Limited.	Renewal of Lease No. 9941 granted to estate of R. C. Smith, dated April 12, 1890 of land and Water privileges at Fenelon Falls, Ont.

Railways and Canals during the Fiscal Year ended March 31, 1912—*Continued.*

CANAL—*Continued.*

Are	Term.	Commencement of Term.	Annual Rental.	Due each Year.	First Instalment Due.
			$ cts.		
6,000 sq. ft.	During pleasure	Oct. 1, 1911.	120 00	Oct. 1	Oct. 1, 1911
9,650 "	"	Jan. 1, 1912.	193 00	Jan. 1	Jan. 1, 1912
47,000 "	21 years renewable	March 1, 1910.	50 00	March 1	March 1, 1910
	During pleasure	April 1, 1911.	10 00	April 1	April 1, 1911
3,625 sq. ft.	"	Feb. 1, 1912.	145 00	Feb. 1	Feb. 1, 1912

CANAL.

2,082 sq. ft.	99 years	June 1, 1911.	1 00	June 1	June 1, 1911
262 "					
4,348 "					
2,479 "					
	21 years renewable	Sept. 1, 1911.	1 00	Sept. 1	Sept. 1, 1911
	During pleasure	Dec. 1, 1911.	1 00	Dec. 1	Dec. 1, 1911
	21 years renewable	Jan. 16, 1912.	1 00	Jan. 16	Jan. 16, 1912
2·50 acres	During pleasure	March 1, 1912.	5 00	March 1	March 1, 1912

CANAL.

18 acres	During pleasure	Aug. 10, 1911.	10 00	Aug. 10	Aug. 10, 1911

CANAL.

38½ acres	During pleasure	April 1, 1910.	19 25	April 1	April 1, 1910
2·5 acres	"	" 1, 1910.	5 40	" 1	" 1, 1910
0·5 "					
2·4 "					
	21 years renewable for 2 extra terms.	June 1, 1911.	25 00	June 1	June 1, 1911
	21 years	April 12, 1911.	1 00	April 1	April 1, 1911

WATER POWER and other Public Property leased by the Department of

WELLAND

No. of Lease.	Date of Signature.	Lessee.	Lands or Right demised.
	1911.		
19019	Apr. 13.	Water Works Commission of Corporation of City of St. Catharines.	Privilege to lay and maintain water main from Lessee's reservoirs crossing old Canal and Hydraulic Race at Lock No. 4.
19063	May 8.	Wm. J. Aikens.....	Privilege to lay and maintain a 5⅝ inch gas main across Canal land and under Grand River at Dunnville.
19154	June 30.	Robinson Bros., Cork Co. Ltd.	Part of lot 27, Con. 1, T'p. of Humberstone County of Welland, Ont.
19175	Aug. 9.	Department of Marine and Fisheries of Canada.	Land east of Port Colborne Harbour, being part of lot No. 27, Con. 1, T'p. of Humberstone, Co. of Welland.
19183	" 17.	Town of Welland... ...	Lot 26, T'p. of Crowland, Co. of Welland, Ont.....
19199	" 26.	Water Works Commission of town of Welland	Part of lot No. 247 town of Thorold, Co. of Welland, Ont.....
19200	" 26.	" " ..	Surplus water at Welland, Ont.....
H19208	Sept. 2.	The Riverside Stock Farm Company.	Land between Canal and Chippawa Creek, T'p. of Thorold, County of Welland, Ont.
19209	" 9.	The Page-Hersey Iron Tube & Lead Co.	Privilege to lay and maintain a 6-inch pipe from Canal to Lessee's works south of Welland, and draw water.
19251	" 29.	Department of Marine and Fisheries of Canada.	Part of lot No. 20, Con. 1, T'p. of Grantham, County of Lincoln, Ont.
19305	Dec. 9.	The Ontario Power Company of Niagara Falls.	Privilege to erect and maintain an electric power transmission line along west side of Old Canal near Thorold, Ont.
	1912		
I19348	Jan. 12	Montrose Paper Mills, Ltd.	Land on north side of Old Canal near Lock 21, Village of Merritton, Co. of Lincoln, Ont., and surplus of water.
J19416	Mar. 22.	Grand Trunk Railway Company of Canada.	Part of lot 27, Con. 1, T'p. of Humberstone, Co. of Welland, Ont., now in Village of Port Colborne.

F Cancels and supersedes No. 9401.
G Supersedes No. 16382; surrendered.
H Cancels and supersedes No. 15793.
I Supersedes Lease No. 2501; sublet as to land by No. 19524 to Interlake Tissue Mills, Ltd.
J Cancelled by O.C. dated June 29th 1912.

SESSIONAL PAPER No. 20

Railways and Canals during the Fiscal Year ended March 31, 1912—*Concluded.*

CANAL.

Amount of Water Power.	Area.	Term.	Commencement of Term.	Annual Rental.	Due each Year.	First Instalment Due.
				$ cts.		
.....	....	During pleasure...	April 1, 1911.	10 00	April 1....	April 1, 1911
.....	.....	" ..	" 1, 1911.	10 00	" 1....	" 1, 1911
.....	1·53 acres.	" ..	May 1, 1911.	15 00	May 1....	May 1, 1911
.....	0·02 " .	" ..	July 1, 1911.	1 00	July 1....	July 1, 1911
....	1·14 " .	" ..	Aug. 1, 1911.	10 00	Aug. 1....	Aug. 1, 1911
.....	6·19 " .	21 years renewable.	June 1, 1911.	25 00	June 1....	June 1, 1911
$0.....	... .	" .	" 1, 1911.	240 00	" 1....	" 1, 1911
.....	290 acres ..	21 years	Aug. 1, 1908.	200 00	Aug. 1....	Aug. 1, 1908
.....	.....	During pleasure...	" 1, 1911.	100 00	" 1....	" 1, 1911
.....	0·5 acres...	" ...	" 10, 1911.	1 00	" 10 ...	" 10, 1911
....	.....	" ...	Oct. 1, 1911.	50 00	Oct. 1....	Oct. 1, 1911
$50.....	2·16 acres..	21 years renewable.	Jan. 12, 1912.	$80 for land, $3 per H.P. for water.	Jan. 12....	Jan. 12, 1912
....	.....	" .	Feb. 1, 1912.	475 20	Feb. 1....	Feb. 1, 1912

H. F. ALWARD,
Departmental Solicitor.

PROPERTY leased to the Department of Railways and Canals by

INTERCOLONIAL

No. of Lease.	Date of Signature.	Lessor.	Lands or rights demised.
	1911.		
19194	Aug. 18	The Grand Trunk Railway Co. of Canada.	Office fronting on Dufort St., Quebec . . . . .

QUEBEC

	1911.		
†19272	Nov. 17	The Grand Trunk Railway Co. of Canada.	Certain rooms and space on 5th floor of Canadian Express Building, McGill Street, Montreal.

SOULANGES

19264	Oct. 19..	The Grand Trunk Railway Co. of Canada.	Privileges of tying up vessels at Company's wharf and dock at Coteau Landing.

TRENT

	1911.		
19010	April 1.	The Hamilton Bridge Works Co., Ltd.	Land in City of Hamilton, Ont.. . . . .
	1912.		
‡19409	March 4	John Collins.	Land in Village of Hastings, Co. of Northumberland, Ont . . . . .

† Supersedes No. 17476, dated Dec. 30, 1908.
‡ Renews No. 17635, dated April 1, 1909.

various parties during the Fiscal Year ended March 31, 1912.

RAILWAY.

Area.	Term.	Terms of Payment. Commencement of term.	Annual Rental.	Due each year.	First instalment due.
			$ cts.		
....	3 years.....	May 1, 1911...	1,000 00	May 1.....	May 1, 1911.

BBIDGE.

. . ..	2 years.....	May 1, 1910...	2,350 00 for 1st year. 1,800 00 thereafter	May 1.....	May 1, 1911.

CANAL.

....	During pleasure..	Oct. 19, 1911..	.....	....	.....

CANAL.

5,000 s.f.....	9 months..	April 1, 1911.	1 00	April 1.....	April 1, 1911.
... .	2 years....	March 1, 1912.	25 00	March 1....	March 1, 1912.

H. F. ALWARD,
Departmental Solicitor.

PROPERTY conveyed to the Department of Railways and

INTERCOLONIAL

No. of Deed.	Date of Deed.	Grantor.	Lot.
	1910.		
*19134	Sept. 24.	James Yeo	Part of Cad. Lot No. 616
	1911.		
19135	April 27.	Jas. W. Gardner *et ux.*	Land on road leading from Moncton to Lewisville
19180	April 28.	William Hopper *et al.*	Land at
	1910.		
*19253	Dec. 27.	The Roman Catholic Bishop of St. John.	Land in the City of
*19297	Jan. 26.	Elizabeth Rice *et al* (estate Thos Garnett and Jno. J. Holland)	Land on west side of Upper Water St
	1911.		
19311	Aug. 28.	Nova Scotia Steel and Coal Co., Ltd., and the Eastern Trust Co.	Line of railway from Ferrona to Sunnybrae
	1909.		
*19312	Sept. 10.	Octave Fortin	Land in 3rd Range of Parish of
	1910.		
*19425	July 5.	The Builders' Wood-working Co., Ltd.	Land at
	1911.		
*19506	Feb. 20.	Wm. Roche	Land in City of

QUEBEC

	1911.		
*19298	March 13.	The Quebec Improvement Co., Ltd.	Land in Parish of

CORNWALL

	1911.		
19342	Sept. 26.	Geo. G. Smith *et ux.*	Part of E. ½ of Lot No. 15, Con. 1

LACHINE

	1911.		
19342	Oct. 5.	Canada Linseed Oil Mills Co., Ltd.	Part of Lot No. 3499

SESSIONAL PAPER No. 20

Canals during the Fiscal Year ended March 31, 1912.

RAILWAY.

District.	County.	Area.	Amount.
			$ cts.
Fraserville	Kamouraska, Que	50,570 sq. ft	2,528 50 and interest
	Westmorland, N.B	8,505 sq. ft	300 00
Harrisville	"	0·399 acre	40 00
Moncton	"	1·75 acre	5,914 65
Halifax	Halifax, N.S	3,276 sq. ft	975 00
	Pictou, N.S		100,000 00
St. Octave de Métis	Rimouski, Que	3,000 sq. ft	60 00
Sunnybrae	Westmorland, N.B	55,500 sq. ft. or 1.274 acres **	14,400 00
Halifax	Halifax, N.S	564 sq. ft	65 00

BRIDGE.

St. Nicholas and St. Romuald d'Etchemin.	Lévis, Que.	44·14 acres	31,683 15

CANAL.

Cornwall	Stormont, Ont	0·5 acre	675 00 and interest.

CANAL.

Montreal	Hochelaga	25,150 sq. ft	12,575 00

PROPERTY conveyed to the Department of Railways and

RAPIDE PLAT

No of Deed.	Date of Deed.	Grantor.	Lot.
	1911.		
19179	May 15.	Francis A. Mackenzie *et ux.*	S. ½ of Lots Nos. 19 and 20, in Block No. 96, Village of.....

TRENT

	1911.		
19080	April 18.	Corporation of the County of Hastings.	Part of old travelled road in Lots 1 and 2, Con. IV, parts of Bridge and Main Sts. ; Lot IV, Con. 5 ; Lots 11 and 12 and W ½ of Lot 10 on N. side of Bridge St., Tp. of
19126	May 15.	Catherine C. MacColl.	Part of Block XXXV on W. side of Saskatoon Ave., E. side of River Trent, in Town of
19132	June 3.	Clifford B. Wright *et ux.*	Lot No. 5 in Block XXXVIII on E. side of Henrietta St. ...
19159	" 5.	Town of Trenton.....	Part of Lot No. 1, Con. 1 (now in Town of Trenton).....
*19214	Feb. 8.	Jno. B. Ferris *et ux*...	Parts of Block XXXV on W. side of Saskatoon Ave., E. side of River Trent, Town of
19215	July 22.	Mary Jane Coveney...	Part of the N. ½ of Lot No. 7, Con. 2.....
19216	" 24.	Edward Coveney.....	Parts of N. ½ and S. ½ of Lot No. 6, Con. 2. ....
19217	" 24.	"	Part of N. ½ of Lot No. 6, Con. 2. .....
19218	Aug. 5	Stephen J. Potts.....	Gore in front of Lot No. 6 and Gore in front of Lot No. 7, Con. 1.
19219	July 28.	Wm. N.Stephens *et ux.*	Parts of N. ½ and S. ½ of Lot No. 6, Con. 1, and part S. ½ of Lot No. 6, Con. 2.
19220	Aug. 4.	E. E. Stephens *et ux*...	Part of S. ½ of Lot No. 7, Con. 3..... ... .
19291	July 25.	James Owns *et ux*.....	Parts of S. ½ of Lots 6, 7 and8 and part of N. ½ of Lot 8, Con. 3.
19292	Aug. 23.	Alex. T. Green *et ux*..	Parts of Lots 13 and 14 in Water of East River Block.....
	1909.		
*19293	Jan. 16.	Sydney R. Goodwin ..	Parts of Lots Nos. 106 and 107, Con. 1, E. of Yonge St.....
	1911.		
19294	Sept. 16.	Wm. Jno. Doxsee *et ux.*	Part of Lot No. 9, Con. VI (in Town of Campbellford).....
19295	July 29.	Wm. Potts *et ux*.....	Part of the S. ½ of Lot No. 7, Con. 1 .....
19296	June 16.	Wm. McKenzie (Mortgagee of Matheison property).	Part of Lot 25, Con. 1..... .....
19299	Aug. 29.	Ada Jane Shaw and Harper Shaw.	Parts of Lots Nos. 23 and 24 S. Block of Campbellford ; and parts of Lot 10, Con. 7 (in Town of Campbellford).....
19300	" 24.	Ellen Farrell	Part of Lot No. 17 in South Block.....

SESSIONAL PAPER No. 20

Canals during the Fiscal Year ended March 31, 1912.

CANAL.

District.	County.	Area.	Amount.
			$ cts.
Morrisburg	Dundas, Ont	0·165 acre	500 00

CANAL.

Sydney	Hastings, Ont		35 00 and new road.
Campbellford	Northumberland	0·19 acre	400 00
"	"	0·25 acre.	200 00
Murray	Hastings, Ont	0·445 acre	1 00
Campbellford	Northumberland	2·32 acres.	900 00
Seymour	"	8·8 acres	355 00
"	"	60·5 acres	2,600 00
"	"	4 acres.	200 00
"	"	27 acres	1,010 00
"	"	122·9 acres	7,959 50
"	"	9·3 acres	325 50
"	"	16 acres	500 00
Campbellford	"	1·11 acre.	500 00
E. Gwillimbury	York, Ont	31·54 acres.	2,840 00
Seymour	Northumberland	0·54 acre	500 00
"	"	23 acres	1,535 00
Eldon	Victoria, Ont	24·36 acres.	1,453 81
Seymour	Northumberland	0·22 acre.	925 00
Campbellford	"	1·05 acre.	565 00

Number of Deed.	Date of Deed	Grantor.	Lot.
	1908.		
*19313	June 6....	Joseph W. Brammer..	Part of Lot 104, Con. 1, E. of Yonge St..... ... .
	1911.		
19314	June 13...	Henry Hulse *et ux*....	Parts of Lots Nos. 2 & 3, Con. 2, E. of Yonge St..... .....
	1908.		
*19315	Oct. 16...	Martha McClure *et ux*.	Part of Lot 110, Con. 1, W. of Yonge St..... .....
*19316	May 29...	John Richer	Part of Lots Nos. 97 & 98, Con. 1, E. of Yonge St..... ....
*19317	May 26...	W. C. Howard *et ux*...	Part of Lot No. 4, Con. 2, W. of Yonge St..... .....
*19318	Jan. 21...	Edith Artt *et mar*.....	Part of Lot 109, Con. 1, W. of Yonge St.. .....
*19319	Feb. 11...	Hiram West *et ux*.....	Part of Lot 110, Con. 1, W. of Yonge St..... .....
	1911.		
19320	June 9....	Martin W. Barker *et ux*.	Part of Lot No. 8, Con. 2, E. of Yonge St..... . .. .
19321	Aug. 23 ..	Jno. Rellis *et ux*	Land in Town of Campbellford ....
19322	Oct. 31...	R. P. Grills *et ux*.....	Right of way over part of Lot 8, Con. 4..... ....
19323	July 29...	Richard N. Grills *et ux*.	Part of the N. ½ of Lot No. 9, Con. 4..... . ...
19336	April 15..	Charles E. Lundy.....	Part of Lot No. 8, Con. 2, E. of Yonge St.....
19337	May 10...	Jos. W. Bramner *et ux*.	Part of Lot 9, Con. 2, E. of Yonge St.....
	1908.		
*19338	June 22...	Maud. L. Wesley.....	Part of Lot 103, Con. 1, E. of Yonge St.....
	1911.		
19339	June 9....	Chas. Watson *et ux*...	Part of Lot 7, Con. 2, E. of Yonge St..... ..... .
	1908.		
*19340	May 26...	Frank W. Kelly *et ux*.	Part of Lot 5, Con. 2, E. of Yonge St.... ... .
	1911.		
19341	Sept. 1...	Robt. H. Bishop *et al*.	Part of W. ½ of Lot 27, Con. 2 & Parts of Lots 3, 4, 5 & 6 on S. side of Queen St., Balsover.
19382	Oct. 23...	Rosannah Boyd. . ..	Part of Lot No. 5, S. Block of the Town of Campbellford.. ..
19383	Nov. 23...	Edward T. Morton *et al*.	Parts of Lots Nos. 6, 7, 8 & 9 in River Block on east side of George St., in Campbellford.
19384	Nov. 3...	Emily S. Rowed *et al*..	Lots Nos. 14,15,17,16,18,19 & parts of Lots Nos. 13 & 20 River Block, Campbellford.
19385	Oct. 4....	Susan Dayman.....	Part of Lot 18, S. Block Campbellford, and parts of Lots Nos. 10 & 11, Con. 7, and parts of allowance for road between said Lots Nos. 10 & 11.
19386	Oct. 12...	Margaret Dunn.....	Part of Lot No. 21, S. Block & part of Lot No. 10, Con. 7 Town of Campbellford.
19500	Nov. 4. ..	Robert Linton *et ux*...	Land in Town of Campbellford, formerly part of Lot No. 10, Con. 6, and part of Lot No. 3, River Block on West side of River Trent.
19501	Nov. 7....	Hulda Green..... ..	Part of Lot No. 4, S. Block of Campbellford.....
	1908.		
*19502	Sept. 1...	Garibaldi B. Thompson *et ux*.	Parts of Lot No. 106, Con. 1, E. of Yonge St. (now in village of Holland Landing).
	1911.		
19503	Nov. 4....	Wm. M. Keir *et ux*...	Parts of Lot No. 10, Con. 6, in Campbellford.... .....
19504	Nov. 3....	Emily S. Rowed *et al*..	Parts of Lot No. 68 & 69 in Block 'F', town of Campbellford..
	1908.		
*19505	Nov. 3....	Jane Stephenson.....	Part of Lot No. 11 on E. side of Yonge St., Holland Landing.
	1911.		
19511	Oct. 3....	Thos. B. Haig *et ux*...	Parts of N. ½ and S. ½ of Lot No. 8, Con. 5.....
19512	Nov. 4....	Jas. Gibson *et ux*.....	Parts of Lot No. 10, Con. VI (now in town of Campbellford).
	1912.		
19515	Feb. 15...	Fred C. Jewett *et ux*..	Part of Lot No. 24 in S. Block (in town of Campbellford).....

SESSIONAL PAPER No. 20

(Continued).

DEEDS *(Continued).*

District.	County.	Area.	Amount.
			$ cts.
E. Gwillimbury	York, Ont	6.26 acre	812 00
"	"	20.02 acres	4,000 00
"	"	0.65 acre	30 00
"	"	6.9 acre	1,200 00
"	"	18.97 acres	3,475 00
"	"	7 acre	450 00
"	"	8.5 acres	212 50
"	"	2.91 acres	350 00
Seymour	Northumberland, Ont	0.51 acre	375 00
"	"	65 ft. wide	450 00
"	"	7.8 acres	275 00
E. Gwillimbury	York, Ont	18.01 acres	2,000 00
"	"	10.94 acres	1,594 00
"	"	1.3 acre	100 00
"	"	1.05 acre	100 00
"	"	16.07 acres	3,000 00
Eldon	Victoria, Ont	0.5 acre	124 00
Seymour	Northumberland	0.03 acre	15 00
"	"	0.24 acre	800 00
"	"	0.75 acre	3,735 00
"	"	0.39 acre	300 00
"	"	0.21 acre	800 00
"	"	0.29 acre	1,539 84
"	"	0.002 acre	5 00
E. Gwillimbury	York, Ont	0.24, 0.60 acre	84 00
Seymour	Northumberland	0.07 acre	11 50
"	"	0.12 acre	200 00
E. Gwillimbury	York, Ont	0.01 acre	75 00
Seymour	Northumberland	61.10 acres	3,500 00
"	"	0.08 acre	205 00
"	"	0.08 acre	900 00

DEEDS

TRENT CANAL

Number of Deed.	Date of Deed.	Grantor.	Lot.
	1911.		
19516	Nov. 3....	Carrie Maines...	Part of Lot No. 22 in Water or East River Block, in Town of Campbellford.
	1912.		
19517	Jan. 15...	Mary Bateson *et al*....	Part of Lot 17 in Water or East River Block and Part of Lot 10, Con. 6 (now in Town of Campbellford.
19535	Feb. 15...	Louis H.Stephens *et al.*	Parts of Lots Nos. 24 and 25, S. Block, town of Campbellford.
	1911.		
19538	Nov. 29...	Carrie Maines *et al*....	Parts of space between South Block and Water of East River Block, Campbellford.
19563	Sept. 8...	Annie L. Foster.....	Parcel of land between South Block and Water or East River Block ; and pt. of Lot 10, Con. 7 (now in Town of Campbellford).
	1909.		
*19564	May 28...	Sarah A. Denne	Parts of Lots Nos. 103, 104, 105 & 106 and part of allowance for road between Lots Nos. 105 and 106, Con. 1

WELLAND

	1911.		
19127	April 7...	Charles D. Winn *et ux.*	Lot No. 18 and parts of lot Nos. 19, 20, 21, on N. side of Clarence St.; Lots 18, 19 and part of Lots 21, 22 and 23 on S. side of Park St.

*Too late for last year's Report.
**Except reserve 12′ x 100′ to Lucy D. McManus.

SESSIONAL PAPER No. 20

(Concluded.)

DEEDS *(Concluded.)*

District.	County.	Area.	Amount.
Seymour.....	Northumberland, Ont.....	0.2 acre.....	1,530 00
"	"	$\left\{\begin{matrix}0.11\\0.03\end{matrix}\right\}$ acre.....	400 00
"	"	0.24 acre.....	1,200 00
"	"	0.03 acre.....	140 00
"	"	0.05 acre.....	800 00
E. Gwillimbury.....	York, Ont.....	40.2 acres.....	5,000 00

CANAL.

Humberstone.....	Welland, Ont.....		4,000 00

H. F. ALWARD;
Departmental Solicitor.

LETTERS PATENT issued by the Department of Railways and Canals during the fiscal year ended March 31, 1912.

CANADIAN PACIFIC RAILWAY.

Number.	Date.	Grantee.	Description.	Area.	Amount.	Remarks.
	1912.				$ cts.	
19268	Jan. 17...	Mary Plommer.....	Quit-Claim deed of part of district Lot 261, district of New Westminster.....	0·64 ac.....	1 00	

INTERCOLONIAL RAILWAY.

	1911.					
19157	June 23...	Silas W. Copp...	Deed of land in town of Sackville, Westmoreland County, N.B.	0·1 ac.....	....	

TRENT CANAL.

	1911.					
19229	Aug. 24 ..	Hon. Jas. Cockburn *et al*	Revoking letters patent No. 3264 dated Dec. 9, '69, granting permission to keep erected and maintained a certain dam across the River Trent at Campbellford, Ont..... ...	....	.....	
19328	Dec. 5....	Thos. Robinson.. . ..	Deed of part of W. ½ of Lot No. 25, Con. 10, Tp. of Eldon, Co. of Victoria, Ont	2·75 ac.....	....	

WELLAND CANAL.

	1911.					
19248	Sept. 1 ...	City of St. Catharines.	Deed of part of Lot 13, Con. 6, Tp. of Gratham, County of Lincoln, Ont.....	13·55 ac..	1,016 25	

H. F. ALWARD,
Departmental Solicitor.

Property conveyed by the Department of Railways and Canals during the Fiscal Year ended March 31, 1912.

INTERCOLONIAL RAILWAY.

No.	Date.	Grantee.	Description.	Area.	Amount.	Remarks.
	1911.					
19228	Oct. 5...	Department of Public Works.	Transferring portion of I. C. R. wharf at Sydney, N. B.	1,800 sq. ft.	....	Order in Council.

CORNWALL CANAL.

	1911.					
19193	July 31...	Township of Cornwall.	Transferring road culvert and fences on the Montreal road in the T'p. af Cornwall, County of Stormont, Ont.	....	.. . .	....

WELLAND CANAL.

	1911.					
19246	Sept. 11..	Department of Marine and Fisheries.	Part of Lot No. '1A' of the subdivision of Lot. No. 28 Con. 1, Village of Port Colborne, T'p. Humberstone, Ont.	0.525 acre.	.....	Order in Council.

H. F. ALWARD,
Departmental Solicitor.

DAMAGES released to the Department of Railways and Canals during the Fiscal Year ended March 31, 1912.

INTERCOLONIAL RAILWAY.

Number of Release.	Date of Release.	Grantor.	Description.	Amount.
	1911.			$ cts.
19171	July 21..	The Charlton Steam Shipping Co., Ltd.	For damages to steamer *Hollinside* by I.C.R. car at wharf at Pugwash, N.S.	150 00
19247	Sept. 23..	Mary McNeil and Donald J. McNeil.	For claims for damages due to death of John Edward McNeil.	750 00
19288	Oct. 16.	Marguerite Morton.....	For injuries sustained by John Morton in railway accident at Nash's Creek, N.B., on Oct. 6, 1909	1,000 00
19356	Dec. 16..	Mary Ann Gunnip(executrix estate of James Gunnip).	For claims for damages arising out of accident to James Gunnip on government railways.	500 00
	1909.			
*19392	Aug. 2..	Roman Catholic Bishop of diocese of Chatham, N.B.	For land taken for spur line at Petit Roche, parish of Beresford, county of Gloucester, N.B., and damages.	600 00
		RIDEAU CANAL.		
	1912.			
19514	March 12..	Township of Bedford....	For damages by the flooding of certain roads and bridges in township of Bedford, county of Frontenac, Ont., by the waters of the Wolfe and Bob's Lake reservoir systems in connection with the canal.	1,000 00
		SAULT STE. MARIE CANAL.		
	1911.			
19195	Aug. 18 ..	John Erickson.....	Damages arising out of accident to John Erickson owing to falling of plank from canal wall.	750 00
		SOULANGES CANAL.		
	1911.			
19156	July 1..	J. B. Besner.....	For damages to bridge over canal at St. Anthony's road.	63 00
		TRENT CANAL.		
	1911.			
19082	April 20..	Elizabeth Jackson *et mar.*	For damages to lot No. 3, con. 8 and lot No. 3, con. 9, tp. of S. Burleigh, county of Peterborough, Ont.	198 00
19083	May 1..	Mary Ann Routley *et mar.*	For damages to S.E. part of island No. 7, Stoney Lake, tp. of Dummer, county of Peterborough, Ont.	200 00
19096	May 2 ..	Henry S. Bernard. ..	For damages to lot No. 6, con. A, tp. of S. Monaghan, county of Northumberland, Ont.	80 00
19097	April 29..	Wm. Jno. Baptie and Wesley Sherin (executors estate of Peter Baptie).	For damages to island No. 12, Stoney Lake, tp. of Dummer, county of Peterborough, Ont.	225 00
19111	April 12..	Michael Twomey *et al*...	For damages to N.E. ¼ of lot No. 18, con. 6, tp. of Emily, county of Victoria, Ont.	75 00
19112	April 24..	Richard W. Johnson *et ux*	For damages to lot No. 6, con. 4, township of Stanhope, county of Haliburton, Ont.	85 00
19113	May 26..	John H. Hubble *et ux*...	For damages to W. ½ of lot No. 30 and W. ½ of lot No. 31, con. 11, tp. of Dummer, county of Peterborough, Ont.	450 00

SESSIONAL PAPER No. 20

DAMAGES released to the Department of Railways and Canals during the Fiscal Year ended March 31, 1912—*Continued.*

TRENT CANAL—*Continued.*

Number of Release.	Date of Release.	Grantor.	Description.	Amount.
	1911.			$ cts.
19128	May 27..	Thos. J. W. E. Storey *et ux.*	For damages to the N.W. ¼ of lot No. 19, con. 3, tp. of Emily, county of Victoria, Ont.	240 00
19129	May 1..	Patrick Y. Crowley *et ux*	For damages to the S. ½ of lot No. 5, con. 10, tp. of Ennismore, county of Peterborough, Ont.	30 00
19130	April 30..	James Acton *et ux*	For damages to island No. 9 and to lot No. 3, etc., tp. of S. Burleigh, county of Peterborough, Ont	398 00
19131	May 27..	Thos. Cavanagh *et ux*....	For damages to S.E. ¼ of lot No. 7, con. 8, tp. of Ennismore, county of Peterborough, Ont.	108 00
19138	May 16..	Robt. H. Casey *et al*.....	For damages to S. ½ of lot No. 18, con. 4, tp. of Emily, county of Victoria, Ont.	150 00
19170	April 20..	William McGuire *et al*...	For damages to lot No. 4 and the W. ½ of lot No. 5, con. 13, tp. of Harvey, county of Peterborough, Ont.	150 00
19287	Sept. 28..	John J. McBain *et ux*...	For damages to island No. 16 "A", tp. of S. Burleigh, county of Peterborough, Ont.	460 00
19289	July 28..	Daniel Maloney *et al*.. ..	For damages to part of lot No. 9, con. 10, tp. of Douro, county of Peterborough, Ont.	25 00
19290	July 31..	Jos. A. Brown *et al* (estate of Robt. Brown).	For damages to W. ½ of lot No. 30, con. 5, tp. of Dummer, county of Peterborough, Ont.	40 00
*19308	March 25.	Stephen H. O'Connor *et al*	For damages to the S. ½ of lot No. 2, con. 7, tp. of Ennismore, county of Peterborough, Ont.	400 00
19309	July 18..	Susan F. Irwin *et conjux.*	For damages to lots Nos. 48 and 49 con. 15, tp. of Smith, county of Peterborough, Ont.	750 00
19329	Nov. 9..	John H. Fallis *et al*.....	For damages to lot No 7, con. 3, tp. of S. Monaghan, county of Northumberland, Ont.	560 00
19330	Nov. 14..	Wm. Pamment *et al*.....	For damages to the N. ½ of lot No. 15, con. 2, tp. of S. Monaghan, county of Northumberland, Ont.	525 00
19331	Dec. 15..	Township of Bexley.	For damages to public roads, streets and highways in the tp. of Bexley, county of Victoria, Ont.	1,000 00
19332	July 14..	Isaac Moore *et ux*.....	For damages to the N. ½ of lot No. 23, con. 6, tp. of Emily, county of Victoria, Ont.	80 00
19333	Nov. 25..	Robt. T. Hill *et al*.....	For damages to lot No. 9. con. 6, tp. of Harvey, county of Peterborough, Ont.	320 00
19334	Oct. 24..	John J. Northey *et al*. ..	For damages to the N- ½ of lot No. 31, con. 15, tp. of Smith, county of Peterborough, Ont.	100 00
19335	Nov. 3..	Eustace H. Grubb *et ux*..	For damages to island No. 83 tp. of Burleigh (southern division), county of Peterboro', Ont.	25 00
19355	Sept. 19..	Jas. J. Nicholls *et ux* ...	For damages to lots Nos. 9 and 10 on N. side of Church St. and lot No. 13, on side of Victoria St., village of Omemee, Co. of Victoria, Ont.	80 00
19387	Nov. 15..	Samuel Truman *et al*....	For damages to E. ½ of lot No. 22, con. 8, tp. of Eldon, county of Victoria, Ont.	175 00
19388	Sept. 14..	Isabel Eastwood *et al*....	For damages to part of reservation referred to as West Esplanade on plan of portion of lot No. 12, W. of Communication road, tp. of Smith, county of Peterborough, Ont.	400 00
19389	July 17..	Mary Jane Adams *et al*..	For damages to lot No. 1 and the W. ½ of lot No. 2, con. 17, tp. of Harvey, county of Peterborough, Ont.	63 00
19390	Aug. 28..	Wm. Miles *et ux*..	For damages to part of lot No. 31, con. 6, and W. ½ of lot No. 30, con. 7, tp. of Dummer, county of Peterborough, Ont.	208 00
19391	July 29..	George Irwin *et ux*.....	For damages to lot No. 2 on S. side of Ash street, in village of Port Colborne, county of Welland, Ont., caused by raising street level.	440 00
19412	July 11..	Mary H. Kelly *et al* (estate of W. S. Kelly.	For damages to E. ½ of lot No 2, con. 17, tp. of Harvey, county of Peterborough, Ont.	48 00
19413	May 10..	John Krager *et ux*	For damages to N. ½ of W. ½ of lot No. 23, con. 16, tp. of Harvey, county of Peterborough, Ont.	60 00
19507	Dec. 30..	Township of Emily.....	For damages to certain municipal road allowances in tp. of Emily, county of Victoria, Ont.	1,975 00

DAMAGES released to the Department of Railways and Canals during the Fiscal Year ended March 31, 1912—*Continued.*

TRENT CANAL—*Concluded.*

Number of Release.	Date of Release.	Grantor.	Description.	Amount.
				$ cts.
*19508	1910. Nov. 19..	Wm. H. Bradburn *et ux.*	For damages to S. ¼ of lot No. 20 and lot No. 21, con. 5, tp. of Emily, county of Victoria, Ont.	352 00
19510	1912. Feb. 26..	Roy Northey *et al*.....	For damages to W. ½ of lot No. 28, con. 14, tp. of Smith, county of Peterborough, Ont.	60 00
*19513	1910. Nov. 1..	Leo Cadigan.....	For damages to part of lot No. 4 in the 10th con. of Ennismore, county of Peterborough, Ont.	1 00
19519	1912. March 7..	Township of Smith *et al.*	For damages to part of lot No. 12, west of the Communication road, tp. of Smith, county of Peterborough, Ont.	450 00
19520	1911. Nov. 27 .	Wm. A. Davis *et al*.....	For damages to the S. ½ of lot No. 19, con. 8, tp. of Emily, county of Victoria, Ont.	150 00
19522	1912. Jan. 27..	Ann Anderson.....	For damages to the E. 7 ac. of part of lot No. 12, con. 9, tp. of Hamilton, county of Northumberland, Ont.	30 00
19533	1911. Oct. 26..	Thos. C. W. McCague *et al.*	For damages to the S. ½ and to the N.E. ¼ of lot No. 19, con. 3, tp. of Emily, county of Victoria, Ont.	150 00
19536	1912. Jan. 27..	Emaline B. Couch.....	For damages to part of lot No. 2, con. 1, tp. of Alnwick, county of Northumberland, Ont.	200 00
19565	Jan. 5..	Elizabeth Jackson *et al*..	For damages to lot No. 4, con. 10, tp. of Burleigh, (southern division) county of Peterborough, Ont.	240 00
19566	Jan. 23..	Willam Puffer *et ux*.....	For damages to the W. ½ of lot No. 32, con. 10, tp. of Dummer, county of Peterborough, Ont	75 00
19567	1911. Nov. 28..	William Batten *et al*	For damages to island No. 7, Buckhorn Lake, tp. of Harvey, county of Peterborough, Ont.	75 00
19568	July .20..	Ann Anderson *et al*.....	For damages to lot No. 2 on the north side of Ash street, in village of Port Colborne, Ont.	600 00

WELLAND CANAL.

19127	1911. April 7..	Charles D. Winn *et ux*...	For damages to lot No. 17, on the N. side of Clarence St., and to lot No. 17 on S. side of Park St., Port Colborne, Ont:	550 00

* Too late for last year's report.

H. F. ALWARD,
Departmental Solicitor.

PART III

REPORTS OF THE GOVERNMENT RAILWAYS MANAGING BOARD AND OTHER OFFICIALS

FOR THE YEAR 1911-12

Government Railways Managing Board.
W. B. MacKenzie, Chief Engineer, I.C.R.
T. C. Burpee, Engineer of Maintenance, I.C.R.
G. R. Joughins, Superintendent of Motive Power, I.C.R.
S. L. Shannon, Comptroller, I.C.R.
Statement of Casualties, I.C.R.
S. L. Shannon, Comptroller, Windsor Branch.
T. C. Burpee, Engineer of Maintenance, Windor Branch.
W. B. MacKenzie, Chief Engineer, P.E.I. Ry.
H. McEwen, Superintendent, P.E.I. Ry.
W S. Poole, Mechanical Superintendent, P.E.I. Ry.
W. T. Huggan, Accountant and Auditor, P.E.I. Ry.
Statement of Casualties, P.E.I. Ry.
Chairman and Secretary of Government Railways Provident Fund.

MONCTON, N.B., June 14, 1912.

SIR,—The Government Railways Managing Board have the honour to submit the following report on the working of the Government Railways during the fiscal year ended March 31, 1912:—

The board was constituted as follows:—

Mr. A. W. Campbell, C.E., chairman, Ottawa.
Mr. D. Pottinger, I.S.O., assistant chairman, Moncton.
Mr. E. Tiffin, general traffic manager, Moncton.
Mr. F. P. Brady, general superintendent, Moncton.
Mr. J. B. T. Caron, general solicitor, Moncton.

There were eleven meetings of the board during the year, three of these in Montreal and eight in Moncton.

The railways under the control of the board are:

The Intercolonial railway, the Windsor Branch railway, and the Prince Edward Island railway.

Separate accounts are kept for each of these railways, and they will be considered separately in this report.

INTERCOLONIAL RAILWAY.

The following reports of officials are inclosed:—

Report of the Chief Engineer on works charged to capital account.

The report of the Chief Engineer of Maintenance on the repair and renewal of the permanent way buildings and works.

Report of the Superintendent of Motive Power, and of the Mechanical Department's Accountant, with the statements relating to the Mechanical Department.

Also the general accounts of the railway prepared by the Comptroller, as follows:—

1. Capital account.
2. Revenue account.
3. Maintenance of way and structures.
4. Maintenance of equipment.
5. Traffic expenses.
6. Transportation expenses.
7. General expenses.
8. General stores account.
9. General balance.
10. Statement of averages.

Return of casualties.

The length of railway in operation during the year 1910-11 was 1,455·63 miles.

In September, 1911, the branch line from Ferrona Junction to Sunny Brae, in the County of Pictou, N.S., was acquired. The mileage of this branch line is 12·52 miles—so that the length of road in operation on March 31, 1912, was 1,468·15 miles.

CAPITAL ACCOUNT.

The cost of the road and equipment on March 31, 1911, was $93,035,371.08. The additions during the year were as follows:—

Air brakes—to improve triple valves	$ 7,150 00
Bridges—to strengthen	53,551 40
Campbellton—to increase accommodation at	176,810 41
Chatham—diversion of the line and branch to wharf	210,563 93
Construction of spur line from Hampton station to Hampton village	1,711 08
Freight cars—air brakes to	12,160 00
Freight cars—to exchange draw bars of	1,999 72
Fredericton—to increase accommodation at	42,978 63
General protection of highways	114,266 28
Halifax—docks and wharves at	98,898 72
Halifax—to increase accommodation at	73,989 59
Moncton—addition to general office building	80,626 67
Moncton—locomotive and car shops with equipment and new freight yard and cut-off line	106,936 31
Mulgrave—improvements at	28,961 12
New Glasgow—double tracking at	26,069 15
Original construction	175 96
Passenger cars—to equip with fire extinguishers and tool boxes	6,400 00
Princess Pier—additional facilities at	15 05
Rivière du Loup—engine house equipment	6,645 41
Rolling stock	128,485 13
Steamer *Scotia*—new machinery for	832 68
Stellarton—to increase accommodation at	30,000 00
St. John—to increase accommodation at	25,600 00
Surveys and inspections	564 69
Sydney Mines diversion	249,929 45
To increase accommodaton and facilities along the line	50,952 23
Towards the construction of a railway from a point on the Intercolonial railway at or near New Glasgow, in the County of Pictou, to the Town of Guysboro', and from the said line of railway at Cross Roads Country Harbour to the deep water of the said harbour	113,406 49
Towards the construction of a railway from a point on the Intercolonial railway at or near Dartmouth, in the County of Halifax, via Musquodoboit Harbour and the Valley of the Musquodoboit to Dean's Settlement, in the said county	24,696 31
Towards the construction of a railway from a point on the Intercolonial railway at or near Alba, in the County of Inverness, to the Town of Baddeck, in the County of Victoria	11,121 01
Truro—to increase accommodation at	24,951 14
Making the total cost on March 31, 1912	$94,745,819 64

Explanations in regard to the expenditure on capital account will be found in the report of the Chief Engineer, and in the report of the Superintendent of Motive Power.

REVENUE ACCOUNT.

The gross earnings and the working expenses for the year compare as follows:—

Gross earnings	$10,593,785 84
Working expenses	10,591,035 84
Net earnings	$ 2,750 00

There was a gain of $539,569.69 from the operation of the railway for the year. Of this surplus $536,819.69 was transferred in March to equipment renewal account, so that when the books were closed at the end of the year they showed net earnings $2,750.

The gross earnings compare as follows with those of the previous year:—

In 1911-12	$10,593,785 84
In 1910-11	9,863,783 40
Increase	$ 730,002 44

The earnings from passenger traffic compare as follows:—

In 1911-12	$ 3,017,304 63
In 1910-11	2,899,419 82
Increase	$ 117,884 81

The earnings from freight traffic compare as follows:—

In 1911-12	$ 7,008,300 49
In 1910-11	6,344,595 66
Increase	$ 663,704 83

The earnings from mails, express freight and miscellaneous compare as follows:—

In 1911-12	$ 568,180 72
In 1910-11	619,767 92
Decrease	$ 51,587 20

The earnings by mile of railway compare as follows:—

In 1911-12	$ 7,215 74
In 1910-11	6,776 30
Increase	$ 439 44

The earnings by train mile compare as follows:—

In 1911-12	$ 1 43
In 1910-11	1 42

The numbers of passengers carried compare as follows:—

In 1911-12	3,416,553
In 1910-11	3,232,895
Increase	183,658

There was an increase of 158,487 in the number of local passengers and of 25,171 in the number of through passengers.

The weight of revenue producing freight compares as follows:—

	Tons.
In 1911-12..	4,536,599
In 1910-11..	4,101,400
Increase..	435,199

There was an increase in local freight of 367,052 tons, and also an increase in through freight of 68,147 tons.

A number of statements which give detailed information in regard to the traffic are appended to this report. They are as follows:—

Statement of receipts, showing the receipts monthly from passenger traffic, freight traffic, and mails and sundries.

Passenger statement, showing monthly the number of local and of through passengers carried and the mileage.

Freight statement, showing monthly the number of tons of local and through freight carried, and the mileage.

Comparative statement, showing the principal articles of freight carried during this year and the preceding year.

Descriptive statement of freight transported, showing a few of the principal articles.

Statement of coal transported, showing the stations from which it was sent.

Statement showing the quantity of raw and of refined sugar, of fresh and salted fish, of grain for export, and of European freight carried over the railway.

Statements of the ocean-borne passenger business at Halifax, at St. John and at Quebec, showing the number of passengers received by the railway from each of the steamers named.

Statements of ocean-borne freight traffic at Halifax and at St. John, showing the quantity of freight imported and exported by the lines of steamers named and carried over the railway.

WORKING EXPENSES.

The working expenses compare as follows with the previous year:—

In 1911-12..	$10,591,035 84
In 1910-11..	9,595,976 79
Increase..	$ 995,059 05

The averages compare with those of last year as follows:—

Per mile run by engines—

In 1911-12..	1·1248
In 1910-11..	1·0777

Per mile run by trains—

In 1911-12..	1·43
In 1910-11..	1·37

Working expenses per mile of railway—

In 1911-12..	$ 7,213 86
In 1910-11..	6,592 33

The Engineer of Maintenance reports that the road was never in better condition. During the year 476,048 ordinary ties and 190 sets of switch ties were put in.
151½ miles of track were ballasted.
1·83 miles of additional sidings were provided at various points.

Bridges, culverts, wharfs and buildings received necessary repairs.

The fences were repaired and 30·55 miles of fences were built.

The snow sheds and snow fences were repaired.

The Superintendent of Motive Power in his report, which is sent herewith, states that the general condition of the rolling stock is good.

One colonist car, fifty box cars, one refrigerator car, thirty-eight platform cars and ten freight vans were rebuilt in the railway shops to replace an equal number taken out of service.

One milk car was built, and two of the steam motor cars were converted into first-class and baggage cars, in the railway shops.

Five passenger locomotives of the Pacific type and three passenger locomotives of the ten-wheel type, five first-class passenger cars, three colonist cars, Forty-six steel side-dump cars, three hundred and seventy-one box cars, one refrigerator car, seventy platform cars and two stock cars were purchased. The eight locomotives replaced seventeen old small type locomotives, nine of the latter being taken off the register in consequence; the tractive power of the eight modern locomotives exceeding by 6,444 lbs. the tractive power of the seventeen smaller locomotives. Two of the first-class passenger cars purchased replaced the same number taken out of the service. The forty-six steel side-dump cars replaced three hundred and eighty-three six-ton hopper cars which were taken out of the service. Except as noted as above the cars purchased replaced an equal number of cars taken out of the service.

All the above were charged to working expenses.

STORES.

The value of stores purchased was..	$3,710,077 38
The value of stores used was..	4,192,961 31
The value of materials sold was..	282,417 49
The value of stores on hand at the end of the year was:—	
Miscellaneous..	568,723 71
Fuel..	190,007 97
Roadway and bridge material..	620,978 91
Total..	$1,379,710 59

GENERAL.

The winter of 1911-12 was an average one. Very severe cold was experienced in some localities, while the snow fall on the line was considerable. The expenditure for clearing snow and ice was $151,580.68 as compared with $119,612.80 during the previous winter.

The branch line from New Glasgow to Thorburn, owned by the Acadia Coal Company, was operated by the Intercolonial railway, with a tri-weekly service, from September 12 to October 14, 1911.

The expenses of operation amounted to $51.10 and the receipts for passenger traffic amounted to $96.90.

WINDSOR BRANCH RAILWAY.

The line extends from Windsor Junction to Windsor, N.S., and is 32 miles in length. It is under lease to the Dominion Atlantic Railway Company, which operates the line, and which has also running powers over the Intercolonial railway between Windsor Junction and Halifax.

The Windsor branch is maintained by the government, and the company pays to the government one-third of the gross earnings.

The following statement of the accounts prepared by the Comptroller are inclosed:—

No. 1. Revenue account.
No. 2. Maintenance of way and structures.
No. 3. General balance.
No. 4. Statement of earnings.

Also the report of the Engineer of Maintenance on the work done during the year, and on the condition of the branch:—

The revenue (⅓ earnings) was	$73,176 60
The cost of maintenance was	33,854 05
Net earnings	$39,322 55

The earnings increased considerably, compared with those of the previous year, as follows:—

Earnings 1911-12	$73,176 60
Earnings 1910-11	48,191 43
Increase	$24,985 17

There was a slight increase in passenger traffic, while the mail earnings remained stationary. There was a large increase in freight traffic.

The Engineer of Maintenance reports that the track, bridges, and structures have been kept in good repair.

PRINCE EDWARD ISLAND RAILWAY.

The railway is 267·5 miles in length and the gauge is 3 feet 6 inches.

The following reports of officials are inclosed:—

Report of the Chief Engineer on the works charged to capital account.

Report of the Superintendent, who sends statements of the various accounts prepared by the Accountant and Auditor, also the report of the Mechanical Superintendent and the statements in regard to that department, also the return of casualties which occurred during the year:—

The cost of road equipment on March 31, 1911, was	$8,559,685 47
The expenditure during the year was	128,041 91
Making the total cost on March 31, 1912	$8,687,727 38

The report of the Superintendent and the report of the Chief Engineer give the details and explanations in regard to capital expenditure.

Gross earnings	$ 367,203 39
The working expenses for the year were	449,962 91
Deficiency	$ 82,759 52

The gross earnings compare with the previous year as follows:—

In 1911-12	$ 367,203 39
In 1910-11	337,419 55
Increase	$ 29,783 84

The increase was in both passenger and freight traffic.

The working expenses compare with the previous year as follows:—

In 1911-12	$ 449,962 91
In 1910-11	424,104 00
Increase	$ 25,858 91

The necessary work was done to maintain the permanent way and works, and the rolling stock, and they are in a state of efficiency.

INTERCOLONIAL AND PRINCE EDWARD ISLAND RAILWAYS EMPLOYEES' PROVIDENT FUND.

The report of the fund, which has been separately furnished, shows:—

Credit balance on March 31, 1911	$ 273,480 01
During the fiscal year the contributions of the employees amounted to	81,119 81
The contributions of the railways amounted to	81,119 81
Amounts received for refunds	1,482 08
A total of	$ 437,201 71
The total expenditure was	135,247 37
Leaving a balance of	$ 301,954 34
To which is to be added the interest	7,280 37
Making a total amount to the credit of the fund on March 31, 1912	$ 309,234 71

During the year twenty-nine employees were retired and placed upon the fund, and twenty-three have died, leaving three hundred and eighty-seven persons on the list receiving an allowance from the fund at the end of the fiscal year. This is an increase of six persons compared with last year.

In March, 1912, Mr. D. McDonald, Superintendent, Intercolonial railway, at Lévis, Que., was appointed a member of the board in the place of Mr. W. A. Dubé.

We have the honour to be, sir,
Your obedient servants,

A. W. CAMPBELL, Chairman,
D. POTTINGER, Assistant Chairman,
E. TIFFIN, General Traffic Manager,
F. P. BRADY, General Superintendent,
J. B. T. CARON, General Solicitor,
Government Railways Managing Board.

MONCTON, N.B., June 14, 1912.

Honourable FRANK COCHRANE,
Minister of Railways and Canals,
Ottawa, Ont.

SIR,—I have the honour to submit the following report on Capital Account expenditure for the fiscal year ending March 31, 1912.

To increase accommodation at Halifax—

A freight shed was built by contract on quay wall of crib-work (pier No. 9), at Richmond. Electric lighting was installed in this shed by the Railway Department.

A drop-pit was provided in the car repair shop for removing old car wheels and putting in new wheels.

A contract was let for a reinforced cement concrete pier and shed at deep-water terminus (pier No. 2).

A rack was provided in the freight car repair shop for testing triple valves for air-brakes.

The following lots of land were purchased that were required in connection with the improvements to Richmond yard:—

Thomas Flynn, lot No. 1—1,238 square feet.
Abegail Hunt, lot No. 3—4,734 square feet.
Patrick Dwyer, lot No. 4—4,785 square feet.
Isaac Creighton, lot No. 5—10,320 square feet.
John McKinnon, lot No. 6—5,108 square feet.
Isaac Creighton, lot No. 7—7,657 square feet.
Richard Shea, lot No. 8—5,543 square feet.
Emma F. and Susan L. Knowlton, lot No. 9—12,521 square feet.

7,622 lineal feet of track were laid in Richmond yard.

Borings and soundings required in connection with the proposed harbour improvements were made.

To increase accommodation at Truro—

Plans and specifications were prepared for a stone passenger station and a brick freight shed. Tenders were asked and contracts let and work of construction commenced.

Land required in connection with improvements was purchased as follows:—
Howard O. Christie, 14,476 square feet.
James D. Ross, 16,104 square feet.
2,966 lineal feet of tracks were laid in this yard.

Double tracking at New Glasgow—

A second track was laid through New Glasgow yard, 0·58 miles.

To increase accommodation at Stellarton—

Plans and specifications were prepared, tenders asked, and contract let for six additional stalls to the engine-house. The building was practically completed. The material required for the hot water heating plant was ordered and delivered and the work of installation of the plant commenced, and will be completed in fiscal year 1912-13.

1,061 lineal feet of new tracks were laid.

Addition to general office building at Moncton—

Plans and specifications were prepared, tenders asked and a contract let for an addition to the general office building. The work of construction is well advanced.

Contracts were let for the electric passenger elevator and the hot water heating system required in connection with this building and the work of installing is well under way.

All the electric work in connection with this building is being done by day labour by our electrical department.

This work will be completed early in fiscal year 1912-13.

To increase accommodation at St. John—

1,300 square yards of granite paving were laid at the freight sheds and station yard, and on roadway to station from Pond street.

The power-house at the elevator was extended and a new boiler and generator installed, which gives sufficient power to supply the electricity required by the Intercolonial railway at this point.

The electricity was formerly supplied by St. John Street Railway Company, and two small plants located in the elevator and engine-house which have been dismantled. On account of our plant not being in operation during the day, electric light is being supplied for the freight offices and the city ticket office by the St. John Street Railway Company.

A second track was laid between Island yards and Cold Brook, 1·10 miles.

To increase accommodation at Fredericton—

A new brick and stone passenger station was provided.

The following lots of land required in connection with improvements to be made were purchased from the following parties:—

John G. Boyd, lot No. 1—8,448 square feet.
James D. Lynn, lot No. 2—718 square feet.
Estate of Catherine E. Coy, lot No. 3—1,932 square feet.
A. D. Thomas, lot No. 3—Buildings.
Mrs. Ellen Flanagan, lot No. 4—9,400 square feet.
N. Moore, lot No. 5—7,500 square feet.
R. W. McLellan, lot No. 5—Buildings.
A. F. Randolph & Sons, lot No. 6—9,115 square feet.

To increase accommodation at Campbellton—

A brick station with stone trimmings was built.

A concrete platform in connection with the new station was partly built. On account of the cold weather work had to be suspended last fall. It will be completed in the spring as soon as the weather will permit.

Buildings for rest rooms were provided for enginemen and trainmen.

On account of the rearrangement of the yard a wooden freight shed was constructed on a new location by day labour. The temporary freight shed which was built after the fire was taken down and the materials used in the construction of permanent freight shed.

A car repair shop was provided.

A sand house was built.

A drop pit was provided in the engine-house for changing wheels on rolling stock.

The coaling pockets were taken down and erected on a new location near the engine-house, and three additional pockets added.

A loading platform was provided.
A subway was built.
21,485 lineal feet of new tracks were provided.

Diversion of line at Chatham and branch to wharf—

The contract which was let last year for a diversion of the line from Nelson station, easterly through the town of Chatham, thence to a point about 1¼ miles east of the town limits, three miles west of Loggieville, a distance of 8·28 miles, was completed.

The ballasting, which was not included in the above contract, will be done during next year.

Plans were prepared for a new freight shed at Chatham and for remodelling the existing station at Nelson for a freight shed. The material required for these sheds was ordered.

Plans and specifications were prepared for new stations at Chatham and Nelson.

The following persons were paid for land required for the right-of-way:—

Lot No. 2, Jos. Gardner.
Lot No. 9a, John P. Burchill.
Lot No. 9b, John P. Burchill.
Lot No. 63a., Alex. Fraser.
Lot No. 81, F. M. Tweedie.
Lot No. 85, Richard Walsh.
Lot No. 88, Rev. Jos. Theberge.
Lot No. 93, J. D. Creaghan.
Lot No. 96, W. S. Loggie.
Lot No. 97, J. C. Miller.
Lot No. 98, J. C. Miller.
Lot No. 122, John Irvine.
Lot No. 129, Estate of James Bremner.
Lot No. 133, Mrs. Francis McEwen.
Lot No. 134, Helen Dickeson.
Lot No. 135, Peter England.

Information was prepared for the following cases to be referred to the Exchequer Court.

Lot No. 1, John O'Brien.
Lot No. 37, Wm. Wilkinson.
Lot No. 43 & 43a, John McLaggan.
Lot No. 44, Geo. E. Fisher.
Lot No. 75a, Elizabeth Watt.
Lot No. 77a, Elizabeth Watt.
Lot No. 83, Hon. L. J. Tweedie.
Lot No. 87, A. F. & A. R. Loggie.
Lot No. 96, W. S. Loggie.
Lot No. 104a, Miramichi Lumber Co.
Lot No. 104b, Miramichi Lumber Co.
Lot No. 106, Miss Mary McLaughlin.
Lot No. 111, Miramichi Lumber Co.
Lot No. 130, Thos. Foley.
Lot No. 131, Thos. Foley.

Engine-house equipment, &c., Rivière du Loup—

An 8-inch cast-iron sewer was laid from the drop pit in the engine house into the mud basin on the main line of the sewer to the river.

Surveys and inspections—

A preliminary instrumental survey was made from Little Narrows to Whycocomagh.

Locomotive and car shops with equipment and new freight yard and cut-off line at Moncton—

Two hydrants and piping for fire protection were installed in the lumber yard.

For details of jib cranes, triple air-brake testing rack, drop pit for passenger cars, scrap bins, safety cylinders for five buzz planers, furnace for rivet and track bolt machine, machine for sewing and binding carpets, fire hose nozzles and ladders, sewers for closets, drainage around shop, oxg-acettyene welding plant, two hydrauligraphs, ventilator over tire setting apparatus in smith shop, see report of Superintendent of Motive Power and Rolling Stock.

A pitch and gravel roof was put on the gas producer plant building.

The Exchequer Court award in the case Wallberg *vs.* the King in connection with the sewers and water system for the new shops and yard was paid.

The Exchequer Court award in the case Moncton Land Co. and Pacific Breau *vs* the King for the land for the right-of-way for the cut-off line was paid. The cut-off line was advertised for tenders.

Geo. B. Willett and F. M. Tennant were paid for land, lot No. 7, for right-of-way for cut-off line.

To increase accommodation and facilities along the line—

Ste. Flavie.—A standard sand house was provided.
Ste. Flavie.—1,000 lineal feet of new tracks were provided.
Ste. Flavie.—An ice-house was provided.
Mulgrave.—The power-house was extended.
Lourdes.—A station was built.
Jacquet River.—The existing waiting-room and baggage-room was enlarged.
Moffatts.—A new freight shed was provided.
Mitchells.—A loading platform was built and 511 additional feet of siding put in.
Maccan.—904 feet of new track laid in the yard.
Torryburn.—A new siding provided, 346 feet long, also a loading platform.
Carmel.—A new freight shed built.
St. Wenceslas.—An addition was built to the existing freight shed.
Ste. Monique.—Water was provided for the dwelling for the agent.
Pugwash Junction.—A loading platform was built and 405 lineal feet of track laid.
Ste. Anne.—A stand pipe was installed.
Tatamagouche.—Hot-air heating was installed in the station and water closets provided.
Quispamsis.—A new freight sheed was provided.
Between Mitchell and Ste. Perpetue.—A telegraph line was put up.
Linwood.—A shelter and platform was provided.
Ashfield, a crossing.—Siding was put in about 1½ miles west of Orangedale, 360 feet long.
St. Augustine.—A siding was put in 821 feet long.
Ste. Perpetue.—Land was provided for siding accommodation.
Proberts.—A shelter and platform were provided.
Between Old Lake road and Ste. Alexandre.—A new siding was put in 401 feet long.
McKays.—The existing siding was extended 540 feet.

Moirs Dump.—A culvert was built.

Levis.—An ice-house was built.

Levis.—A concrete platform was provided.

Levis.—The estate of William Rhodes was paid for 1,783 square feet of land.

Bear Brook Siding.—Land was purchased for loading accommodation.

Sydney.—A fire hydrant was installed near the cattle-pen at the east end of the freight shed.

Oxford.—Water was put in the station by connecting a 1-inch pipe to the town water supply.

Wells at stations.—Water was provided for the stations at Tobins, Beau Rivage, and Elmsdale.

Amherst.—8,133 square feet of asphalt macadam paving was laid on Amherst Station roadway.

TO STRENGTHEN BRIDGES.

River du Sud bridge—

This is a through plate girder bridge, 9 spans. Seven of the spans, 65 feet long, were renewed during the year and the necessary alterations made to the masonry.

Etchemin bridge—

The steelwork for new deck plate girder bridge, 49 feet long over all, was delivered on the ground and will be erected early next year.

Antigonish bridge—

The through truss bridge, 1 span, 168 feet from centre to centre of bearings, which was delivered last year, was erected in place.

Bagot Tank bridge—

One through plate girder span, 23 feet long over all, was erected in place.

Nelson undercrossing—

One deck plate girder span, 34 feet over all, was erected in place.

During the year rolled beam spans were constructed and erected by our bridge crews as follows:—

	Feet.	Inches.
2½ miles east of Harbour au Bouche station, 1 span	12	
1 mile east of Linwood station, 1 span	12	
½ mile west of Linwood station, 1 span	11	
1½ miles west of Pomquet station, 1 span	17	
¾ mile west of Antigonish station, 1 span	19	
½ mile west of James River station, 1 span	12	6
¼ mile west of Woodburn station, 1 span	11	
1 mile west of Truro station, 1 span	11	
½ mile west of Londonderry station, 1 span	11	6
2 miles west of Londonderry station, 1 span	11	6
¼ mile east of Westchester station, 1 span	11	
½ mile west of Oxford Junction station, 1 span	10	6
3 miles west of Springhill station, 1 span	9	6
½ mile west of Passekeag station, 1 span	18	6
1½ miles west of Coal Branch station, 1 span	11	
¼ mile east of Birch Ridge station, 1 span	11	

	Feet.	Inches.
1½ miles west of Adamsville station, 1 span	9	6
1 mile west of Harcourt station, 1 span	11	7
1 mile west of Chatham Junction station, 1 span	13	
4 miles east of Red Pine station, 1 span	11	
4½ miles east of Jacquet River station, 1 span	11	6
2½ miles east of Campbellton station, 1 span	14	9
2 miles west of Campbellton station, 1 span	11	
2 miles west of Matapedia station, 1 span	12	6
1½ miles west of Flat Lands station, 1 span	15	6
2 miles east of Mill Stream station, 1 span	11	6
1¼ miles east of Assametquaghan station, 1 span	11	
¼ mile west of Assametquaghan station, 1 span	12	
½ mile west of Assametquaghan station, 1 span	12	6
4 miles west of Assametquaghan station, 1 span	11	6
2 miles east of Beau Rivage station, 1 span	11	

Improvements at Mulgrave—

A new brick passenger station was erected and electric lighting installed. A steam heating apparatus was put in this building which is supplied with steam from the existing power plant at the Transfer ferry.

Considerable excavation was made for rearrangement of tracks made necessary by the erection of the new station, and a crib retaining wall erected along the bank. Tracks were rearranged and 1,013 lineal feet of new siding laid.

Sydney Mines diversion—

The work in connection with the contract that was let last year for a single track diversion from near George's River station to Sydney Mines via the shore of Little Bras d'Or, a distance of 9·09 miles, was carried on during the year. The grading was about completed.

Track material was all delivered.

The fencing of the right-of-way was completed.

Steel bridges with the necessary masonry were erected at George's river and George's River under-crossing. The masonry required for the bridge at Glebe House Cove was also completed, and the steel delivered on the ground, ready for erection.

Plans and specification were prepared for stations and freight sheds at Little Bras d'Or and Florence, and submitted for approval.

The tracklaying and ballasting of the line will be done in year 1912-13.

The following persons were paid for land for the right-of-way:—

Lot No. 1a.—Estate of John L. McKay.
Lot No. 8.—Mrs. Jane Peppler.
Lot No. 9.—Mrs. Susan Jessome.
Lot No. 20a.—District school.
Lot No. 41.—Roman Catholic diocese.
Lot No. 42.—William Young.
Lot No. 59c.—William Moore.

The following cases will be referred to the Exchequer Court, if not otherwise settled.

Lot No. 1, John McMullin.
Lot. No. 2, Rev. Martin McPherson.
Lot No. 10, Heirs of J. L. McKay.
Lot No. 18, Joseph O'Handley.
Lot. No. 19, Mary Ann O'Handley.

Lot No. 40, Mrs. Chas. Jessome.
Lot No. 51, Pius Gannon.
Lot No. 62, Richard Cox.

General Protection of Highways.

An overhead roadway bridge was erected over the north main line at St. George street, Moncton, N.B.

A subway was provided under the north line at Main street, Moncton, N.B.
Notre Dame de Charny, a subway was provided.
Rivière du Loup, " "
St. Fabien, " "
Ste. Flavie, " "
Hopewell, " "
Robertson Crossing, " "
Proberts, an overhead bridge was erected.
Eastville, a diversion of the highway was made.
1 mile east of Maccan, a diversion of the highway was made.
Electric signal crossing bells were installed at the following places:—
Truro, Stewiacke, New Glasgow, Stellarton, Matapedia, Amqui, Ste. Flavie, Drummondville, McKays, Hopewell, Glengarry, Debert, Cook's Brook, Shediac, and Bennett's Crossing.

Original Construction—

Under this appropriation the following amounts were paid:—

William Pero, $28.28 for 4,061·8 square feet of land and $114.58 for 9,782·2 square feet of land taken for the right of way for extension to Sydney Mines.

R. T. MacIlreith, for legal services in connection with claim of Miss Margaret Houlihan for land damages at Windsor Junction.

Branch Line Alba to Baddeck—

Complete preliminary and location surveys, plans, specifications and estimates were made and advertised for tenders for the construction. Expropriation plans for the right of way were deposited of record in the Registrar's office for the county.

Branch line Sunnybrae to Guysboro'—

Examinations, reports and estimates were made of the located line between Sunnybrae, Guysboro and Country Harbour. Plans, profiles, specifications and estimates were made of the part between Guysboro and Country Harbour via Cross Roads, the work advertised, tenders received and a contract let, which was afterwards cancelled. Expropriation plans for the right of way from Guysboro' to Country Harbour were deposited of record in the Registrar's office for the county.

Branch line Dartmouth to Dean's:

Surveys, plans, specifications and estimates were provided; tenders asked and a contract let. Expropriation plans for the right of way were deposited of record in the Registrar's office for the county.

Construction of a spur line from Hampton Station to Hampton Village.

A location survey was made for this spur line and plans, specifications and estimates were prepared, and the work advertised for tender. Expropriation plans for the right of way were deposited of record in the Registrar's office for the county.

SESSIONAL PAPER No. 20

New Machinery for ss. 'Scotia.'

For details of this appropriation see report of Superintendent of Motive Power and Rolling Stock.

Rolling Stock.

For details of this appropriation see report of Superintendent of Motive Power and Rolling Stock.

To Equip Passenger Cars with Fire Extinguishers and Tool Boxes.

For details of this appropriation see report of Superintendent of Motive Power and Rolling Stock.

Air Brakes to Freight Cars.

For details of this appropriation see report of Superintendent of Motive Power and Rolling Stock.

To Exchange Drawbars of Freight Cars—

For details of this appropriation see report of Superintendent of Motive Power and Rolling Stock.

To improve Triple Valves of Air Brakes—

For details of this appropriation see report of Superintendent of Motive Power and Rolling Stock.

I have the honour to be, sir,
Your obedient servant,

WM. B. MACKENZIE,
Chief Engineer.

D. POTTINGER, Esq., I.S.O.,
Asst. Chairman G.R.M. Board,
Moncton, N.B.

INTERCOLONIAL RAILWAY.

OFFICE OF THE ENGINEER OF MAINTENANCE,
MONCTON, N.B., May 27, 1912.

To the Canadian Government Railways Managing Board,
Moncton, N.B.

GENTLEMEN,—I beg leave to submit the following annual report for the maintenance of Way and Structures Department for the year ending March 31, 1912:—

TRACK.

During the year 199·06 miles of 4-inch, 4½-inch, 4¾-inch and 5-inch rails were taken up and replaced with 4½ and 5-inch rails.

TIES.

During the year 476,048 ordinary ties and 190 sets switch ties were put in track.

BALLASTING.

During the year 151½ miles of track was ballasted.

SWITCHES AND SEMAPHORES.

New semaphore signals were erected at the following stations:—
St. John, 1; Apohaqui, 1; Moncton, 1; Campbellton, 1.

80 new switches were installed during the year.

New telegraph signals were provided at the following stations:—

Bagot, 1; Aston Junction, 1; St. Eugène, 1; St. Leonard, 1; St. Germain, 1; St. Nicholas, 1.

Necessary repairs were made to all semaphores and switches and telegraph signals on the system.

SIDINGS.

During the year 1·83 miles of additional siding accommodation has been provided at the different stations on the system.

FENCES BUILT BY OUR OWN MEN.

During the year 30·55 miles of woven wire fence was built at different points on the system by our own men.

Necessary repairs were made to fences on the system during the year.

SNOW FENCES.

During the year there was built 1,171 rods of stationary snow fence, 8 feet high.
There was built during the year 544 rods of portable snow fence.
Necessary repairs were made to all snow sheds and fences, where required.

WHARFS AND TRESTLES.

Necessary repairs were made to the following wharfs and trestles during the year:—

St. John, long wharf; St. John, ballast wharf; Moncton, public wharf; Pt. du Chêne, wharf; Dorchester, wharf; Sackville, wharf; Amherst, wharf; Halifax, pier No. 1; Halifax, pier No. 2; Halifax, pier No. 3; Halifax, pier No. 4; Halifax, pier No. 5; Halifax, coal trestle (D.W.T.); Halifax, Cunard wharf; Richmond, pier No. 6; Richmond, pier No. 7; Richmond, pier No. 8; Mulgrave, wharf; Pt. Tupper, wharf; North Sydney, wharf; Pictou Landing, wharf; Pictou, wharf; Newcastle, wharf; Newcastle, coal trestle; Stellarton, coal trestle; Tobin Branch, trestle; Princess Pier, wharf; Rivière du Loup (branch), wharf.

BRIDGES AND CULVERTS.

During the year the following bridges and culverts were repaired:—

Boundary Creek, bridge; Briley Brook, bridge; Blackville, bridge; Boisetown, culvert; Belmont, culvert; Bartholemew (Indiantown branch), bridge; Black River, bridge; Crowson's, abodieau; Calhoun's, abodieau; Clearwater, bridge; College Bridge, culvert; Chaudiere Junction, culvert; Delotbiniere, bridge; Dessaint, bridge; Dorchester, culvert; Dewar's, bridge; DeBert, culvert; Fredericton, bridge; Folleigh, bridge; Ferrona Junction, bridge; Glengarry, bridge; Gibson, culvert; Grand Narrows, bridge; Hurley Brook, bridge; Harlaka Junction, culvert; Hadlow, culvert; James River, bridge; Keenan's Brook, bridge; Lakeview, culvert; Lorne, culvert; Lemieux, culvert; Leitche's Creek, culvert; Mulgrave, bridge; Motts (Dartmouth branch), bridge; Mill Creek, bridge; Matapedia, bridge; Missiquash, bridge; Mac-

Kenzie, bridge; Montmagny, culvert; Moncton, culvert; Maccan, culvert; Merigomish, culvert; Nappan, bridge; Nicolet, culvert; Nelson Hollow, bridge; New Glasgow, culvert; Pomquet, bridge; Pirate Cove, bridge; Pictou Branch, culvert; Painsec Junction, culvert; River Dennys, bridge; Riversdale, culvert; Renous, bridge; Richmond, culvert; Rimouski, bridge; Rivière du Loup (branch), bridge; Rivière du Loup, culvert; Rivière Ouelle Junction, culvert; Old Lake Road, culvert; St. John (Troops), bridge; St. John, culvert; St. Henri, bridge; St. Henri, culvert; St. Fabien, bridge; St. Romuald, bridge; St. Paschal, bridge; St. Charles Junction, culvert; St. Alexandre, culvert; St. Simon, culvert; Ste. Louise (west of), bridge; Shediac (west of), culvert; Shediac (east of), culvert; Scoudouc, bridge; Sacre Cœur, culvert; Springhill Junction, culvert; Sydney, culvert; Truro, culvert; Tracadie, culvert; Trenton, culvert; Trois Pistoles, bridge; Upper Dorchester, culvert; Upper Cross Creek, bridge; Westchester, bridge; Villeroy, culvert.

OVERHEAD BRIDGES.

During the year the following overhead bridges were repaired:—

St. Romuald, St. Fabien, Quispamsis, Rothesay, Lakeside, Nappan, Derby Junction.

PAINTING—(BRIDGES).

Location of Bridge—Description of Work.

Benjamin River, 3 spans painted.
Belledune (west of), 1 span painted.
Bartibogue (east of), 1 span painted.
Barnaby River, 1 span painted.
Bartholmas River (east of Blackville), 2 spans painted.
Brook Bridge (west of Doaktown), 1 span painted.
Eel River, 3 spans painted.
Elm Tree, 1 span painted.
Folleigh (east of), 1 plate girder 45 feet.
Gilmore Brook, painted.
Grant's Brook (east of Beresford), 1 span painted.
Grand Narrows, 7 spans painted.
Jacquet River, 3 spans painted.
Kehoes (east of Blackville), 1 span painted.
Kouchibouquicis (west of Kent Junction), 1 span painted.
Lousion River (east of Nash's Creek), 1 span painted.
Little River (east of Bathurst), 1 span painted.
Little Fork (east of Athol), lattice 108 feet.
Mill Creek (east of Campbellton), 3 spans painted.
Middle River (east of Bathurst), 3 spans painted.
Murphy's ($1\frac{3}{4}$ miles west of Antigonish), through bridge painted.
Manzers (west of station), 2 sets girders painted.
Murphy's (west of Antigonish), 64 feet deck girder painted.
New Mills, 3 spans painted.
Nash's Creek (west of), 1 span painted.
Mortimore, 1 span painted.
North Cocagne (1 mile west of Catamount), 1 span painted.
South Cocagne ($\frac{1}{2}$ mile west of Catamount), 1 span painted.
North River ($\frac{1}{2}$ mile east of Catamount), 1 span painted.
North Coal Branch River, 2 spans painted.
South Coal Branch River, 2 spans painted.
Nappan (west of), 3 girders painted.

Palmer's Road (east of Dorchester), plate girder 86 feet.
Point Tupper, apron and bridge transfer patched.
Restigouche River, painted.
Renous River (east of Doaktown), 4 spans painted.
Westchester (west of), plate girder painted.
West River (¼ mile east of Antigonish), floor system and lower cords coated with Pintch gas-tar.
Yank Grant (3 miles west of Antigonish), through girder painted.

PAINTING (BUILDINGS).

Location of Station, &c.—Description of Work.

Assametquaghan, station, exterior.
Amqui, station, exterior.
Amos, shelter, exterior and interior.
Acadieville, station, exterior and interior.
Anagance, waiting room, exterior and interior.
Apohaqui, station, exterior and interior.
Amherst, freight house, interior and exterior.
Amherst, bonded freight house, exterior.
Afton, station, exterior.
Alba, station, exterior.
Alba, freight shed, exterior.
Alton, station, exterior.
Bagot, station, exterior.
Bagot, freight shed, exterior.
Bic, station, interior.
Blacklands, shelter, exterior.
Belledune, station, exterior.
Beresford, station, exterior.
Bathurst, station, exterior.
Bathurst, baggage room, interior.
Bathurst, tank, exterior (roof).
Bartibogue, station, interior.
Bartibogue, freight shed, exterior.
Beaver Brook, station, exterior and interior.
Berry's Mills, tool house, exterior.
Barnaby River, station, exterior.
Bryenton's, shelter, exterior.
Barnett's shelter, exterior.
Berry's Mills, station, exterior.
Boundary Creek, station, exterior and interior.
Brookville, station (2 rooms), interior.
Beaver Bank, station, exterior.
Barra Glen, shelter, exterior.
Beaver Cove, shelter, exterior.
Bedford, station, exterior.
Carmel, station, exterior.
Carmel, freight shed, exterior.
Carrier, station, exterior.
Chaudiere Curve, station, exterior and interior.
Chaudiere Curve, baggage room, exterior.
Chaudiere Curve, Boucher's dwelling, exterior.

Chaudiere Curve, Tardiff's dwelling, exterior.
Chaudiere Curve, agent's dwelling, exterior.
Chaudiere Curve, old ice house, exterior.
Chaudiere Curve, water closets, exterior.
Catamount, station, exterior.
Charlo, freight shed, exterior and interior.
Craig's, shelter, exterior.
Canaan, station, exterior.
Canaan, freight shed, exterior.
Chatham Junction, station, exterior.
Chatham Junction, tank (part), exterior.
Cook's Brook, station, exterior and interior.
Coal Brook, station, exterior.
Dalhousie Junction, station, exterior and interior.
Dalhousie Junction, freight shed, exterior and interior.
Dalhousie, freight shed, exterior and interior.
Dalhousie, station, exterior and interior.
Dewar's, shelter, exterior and interior.
Denmark, station, interior.
Eel River, station, exterior and interior.
Ellershouse, station, exterior.
Dartmouth, station, exterior.
Enfield, station, exterior.
Eureka, station, exterior and interior.
Ferrona Junction, station, exterior and interior.
Fairview, station, exterior.
Fredericton, trackmaster's office, interior.
Gloucester Junction, freight shed, exterior.
Gallagher Ridge, shelter, exterior.
Greenville, station, exterior.
Halifax, elevator, exterior.
Harcourt's, station dwelling, exterior and interior.
Humphrey's, station, exterior and interior.
Harrisville, station, exterior and interior.
Hampton, freight shed, exterior.
Hopewell, station, exterior.
Isle Verte, station, exterior and interior.
Indiantown, station, freight and coal sheds, exterior.
Jacquet River, station, exterior.
Jacquet River, freight shed, exterior.
Kent Junction, station, exterior.
Lemieux, freight shed and station, exterior.
Levis, agent's dwelling, interior.
Levis, superintendent's office, exterior.
Levis, station, exterior.
Levis, engine house (doors and windows).
Levis, car repair shop (roof), exterior.
L'Islet, water crane, exterior.
Lakeside, station, exterior.
Londonderry, station, exterior.
Lemond, station, exterior.
Leitche's Creek, station, exterior.
LaDurant, freight shed and station, exterior.

Montmagny, umbrella roof and station, exterior.
Matapedia, agent's dwelling and station, exterior.
Matapedia, freight shed, exterior.
Millerton, station and freight shed, exterior.
Merigomish, tool house, exterior.
Meadowville, station and freight shed, exterior and interior.
Mt. Uniacke, station, exterior.
Milford, station, exterior.
Murray's flag station, exterior.
McLaggan's, shelter, exterior.
New Mills, station and freight shed, exterior.
Newport, station, exterior and interior.
Nash's Creek, station, exterior.
Norton, station and freight shed, exterior.
Orangedale, station and freight shed, exterior.
Oxford Junction, station, exterior trimmings, &c.
Oxford Junction, freight shed, exterior and interior.
Ottawa Brook, shelter, exterior.
Parker's, shelter, exterior.
Petitcodiac, station (office and W. R.), exterior.
Petitcodiac, freight shed, exterior.
Pt. du Chene, station, exterior and interior.
Pt. du Chene, agent's dwelling and freight shed, exterior.
Pictou, freight shed, exterior.
Pt. Tupper, station and baggage room, exterior and interior.
Pt. Tupper, freight shed, exterior.
Quispamsis, station, exterior.
Rogersville, station and freight shed, exterior.
Rivière Ouelle Junction, tank, exterior.
Red Pine, station and freight shed, exterior.
Rimouski, station, interior.
Rivière du Loup, ice-house, exterior.
Rivière du Loup, turntable (doors and windows), exterior.
Riverside, station, exterior.
River John, station and freight shed, interior.
Richmond, shed No. 8, station and dwelling, exterior.
St. Eugene, station and freight shed, exterior.
St. Leonard, station, agent's dwelling, tank and freight shed, exterior.
St. Wenceslas, station, exterior.
St. Appolinaire, station and freight shed, exterior.
St. Nicholas, station agent's dwelling, exterior and interior.
St. Josephs, station agent's dwelling, exterior and interior.
St. Romuald, station and freight shed, exterior.
St. Pierre, station, exterior.
St. Charles Junction, water crane, exterior.
St. Fabien, tank, exterior.
Ste. Helene, station and tank, exterior.
Ste. Luce, station (roof and gallery), exterior.
Ste. Anne, agent's dwelling, exterior.
Sacre Cœur, station, exterior and interior.
St. Fabien, station (roof), exterior.
St. Fabien, sectionman's shanty, exterior.
St. Arsene, station, exterior and interior.
St. Andre, freight shed (roof), exterior.

Salisbury, station, exterior and interior.
Scoudouc, station, exterior and interior.
Shediac, baggage room, exterior and interior.
Sussex, tank, exterior.
St. John, elevator and gateman's shanty, exterior.
St. John, elevator office, cattle shed office and signal shanty, and tower house, exterior and interior.
St. John, shed No. 9 (patched), exterior and interior.
St. John, coachman's shanty, Mill street, exterior and interior.
Scottsburn, station, interior.
Shenacadie, station, exterior and interior.
Sunny Brae, shelter, exterior and interior.
Tracadie, station (roof), exterior.
Tatamagouche, station, exterior and interior.
Tatamagouche, freight shed, interior.
Torryburn, station, exterior.
Underhill's, shelter, exterior.
Valley, station, exterior.
Villeroy, station and agent's dwelling, exterior.
Westchester, station, exterior.
Westville, agent's dwelling, interior.
Windsor Junction, station, exterior.
Wellington, station, exterior.

BUILDINGS AND PLATFORMS.

Necessary repairs were made to stations, dwellings and out-buildings on the system during the year at the following places:—

Location.	Location.	Location.
Aston Junction,	Chaudiere Curve,	Greenville,
Amqui,	Causapscal,	Grand Narrows,
Assametquaghan,	Charlo,	Harcourt,
Anagance,	Coal Branch,	Hampton,
Apohaqui,	Canaan,	Halifax,
Amherst,	Cross Creek,	Hilden,
Alba,	Chatham,	Hopewell,
Avondale,	Chatham Junction,	Hawkesbury,
Bic,	Cold Brook,	Isle Verte,
Bagot,	Conn's Mills,	Iona,
Beau Rivage,	Dalhousie,	Indiantown,
Belledune,	Dalhousie Junction,	James River,
Bathurst,	Derby Junction,	Jacquet River,
Beaver Brook,	Durham,	Jones,
Boisetown,	Denmark,	Levis,
Blackville,	Dartmouth,	Lemieux,
Barnett's,	Elmsdale,	L'Islet,
Berry's Mills,	Enfield,	Little Metis,
Belmont,	Eureka,	Lac au Saumon,
Boisedale,	East Mines,	Loggieville,
Bedford,	Flatlands,	Lakeside,
Brookville,	Ferrona Junction,	Londonderry,
Carrier	Folleigh,	Lakeview,
Carmel,	Gloucester Junction,	Linwood,
Chaudiere Junction,	Gibson,	Leitche's Creek,

Lacation.	Location.	Location.
Lyon's Breek,	Painsec Junction.	Ste. Luce,
Manseau,	Pt. du Chene,	St. Anclet.
Montmagny,	Pictou Landing,	St. Paschal.
Millstream,	Pictou.	Ste. Moise,
Matapedia,	Pugwash.	St. Appolinaire,
Millerton.	Pugwash Junction,	St. Eloi,
McLaggan's,	Qui-pamsis.	St. Octave,
McGivney's,	Rivière Ouelle.	St. Cyrille,
Moncton,	Rivière Ouelle Jct.,	Salisbury,
Milford,	Rivière du Loup,	Springhill Junction.
Murray's,	Rimouski.	Sydney.
Malagash,	Rogersville,	Shubenacadie,
Merigomish,	Rothesay,	Shenacadie,
McKinnons Harbour,	Rockingham,	Scottsburn,
Marshy Hope,	River John,	South River,
Macaan.	Riversdale,	Sandyville,
New Mills,	River Dennys.	Truro.
Newcastle,	St. Germain.	Trenton.
Nauwigewauk,	St. Monique,	Tatamagouche,
Nappan,	St. Romuald,	Thompson,
New Glasgow.	St. Michel.	Villeroy,
Norton.	St. Arsene.	Valley,
North Sydney,	St. Leonard Junction,	Windsor Junction.
North Sydney Jct.,	St. Fabien,	Westchester,
Old Lake Road,	St. Joseph,	Westville.
Onslow,	St. Eugene,	Wentworth,
Oakfield,	St. Nicholas.	Wellington,
Orangedale,	St. Wenceslas.	West River,
Oxford.	St. Vallier,	West Bay Road.
Oxford Junction.	St. Charles Junction.	Kent Junction.
Penniac.	St. Pierre.	Kempt.
Petitcodiac,	Ste. Flavie.	

During the year necessary repairs were made to all out-buildings such as water closets, hand-car houses, coal houses, tanks, &c.

Necesary repairs were made to the following buildings, &c., during the year at St. John:—

Shed Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13; grain elevator, train shed, coachman's house, gateman's shanty, yard office, station, I.C.R. dwellings, car inspector's shanty, round house, freight shed.

The following buildings at Richmond and Halifax were repaired:—

Cattle shed; North Street station; North Street transfer shed; shed Nos. 1, 2, 3, 4 and 8; Richmond station; I.C.R. dwellings; shops—Willow Park; mechanical repair shops, North street; brick freight shed; postal building; D.A.R. freight shed; express building; track scales (D.W.T.); Milkman's shanty; immigration shelter; blacksmith shop (D.W.T.); switch house; loading platform (D.W.T.); car cleaners' building; coal shed, Richmond.

The following buildings at Moncton were repaired during the year:—

Station, coal plant, electric plant, new shops, general offices, government cottages (Main street and Bridge street), old shops, freight shed, transfer shed, station platform, ice-house, track blacksmith shop, track carpenter shop, engine house, track scales.

Round houses and shops were repaired during the year at the following places:—

Boisetown,
Blackville,
Campbellton,
Chaudiere Junction,
Drummondville,
Dalhousie,
Dartmouth,
Gibson,
Moncton,
Mulgrave,
Nicolet,
North Sydney,
Newcastle,
Oxford Junction,
Pictou,
Pt. Tupper,
Pt. du Chêne,
Pirate Harbour,
Rivière du Loup,
Richmond,
St. John,
Sussex,
Sydney,
Ste. Flavie,
Ste. Rosalie,
Stellarton,
Truro.

Necessary repairs were made during the year to the following loading platforms:—

Acadieville,
Apohaqui,
Bathurst,
Boisetown,
Berry's Mills,
Cold Brook,
Fort Lawrence.
Halifax,
Harcourt,
Hampton,
Indiantown,
Leitche's Creek,
Millerton,
Mulgrave,
Orangedale,
Pictou,
Pictou Landing,
Rothesay,
Sussex,
St. John.

The following buildings were built or repaired to replace buildings destroyed or damaged by fire last year:—

Station, Sacre Cœur.
Flour shed (No. 13), St, John, repaired.
Station, Sydney, repaired.
Temporary freight shed, Truro, new.
Car inspectors' building (D.W.T.), Halifax, new.

Station, shelter and platform at Dewar's was destroyed by fire and replaced during year.

GENERAL.

Repairs were made to crossings on the line at various places, where required.

Gates and cattle-guards have been repaired throughout the line.

Glass was put in, and glazing done where necessary.

Ladders for buildings and semaphores were provided where necessary throughout the line.

Necessary repairs were made to turntables, where required.

Semaphores, switches and telegraph signals have been painted throughout the line.

Necessary repairs have been made to hand-cars, trollies, baggage-trucks and wheelbarrows throughout the line.

Sign boards were made and put up where required.

Boxes were made for packing second-hand bolts and spikes, when necessary.

Necessary repairs were made to steam shovels, steam cranes, pile-drivers, &c.

I can say with a great deal of satisfaction that the road was never in better condition than it has been during the last year.

Yours truly,

T. C. BURPEE.

INTERCOLONIAL RAILWAY OF CANADA.

MONCTON, N.B., June 14, 1912.

SIR,—I have the honour to submit herewith the annual report of the mechanical department for the year ending March 31, 1912.

I might add that the general condition of the rolling stock is good, with the exception of the cars and locomotives condemned, as shown in the attached report.

I have the honour to be, sir,
Your obedient servant,
G. R. JOUGHINS,
Supt. of Motive Power.

D. POTTINGER, Esq., I.S.O.,
Assistant Chairman,
Government Railways Managing Board,
Moncton, N.B.

INTERCOLONIAL RAILWAY OF CANADA.

OFFICE OF THE MECHANICAL ACCOUNTANT.

MONCTON, N.B., June 7, 1912.

SIR,—I beg to submit the following information for the annual report for the fiscal year ended March 31, 1912:—

A.—Statement showing the number of locomotives and the different classes of other rolling stock on the line.

B.—Statement showing the mileage made, and the coal, oil, grease and waste consumed by the locomotives.

Also a summary of the principal work done in the shops at Moncton, Halifax and Rivière du Loup.

The following Rolling Stock was purchased:—

On Capital account,—
- 4 locomotives (switching type).
- 2 baggage cars.
- 15 tank cars.

On renewals account, (revenue)—
- 8 locomotives (5 pacific and 3 ten wheel passenger).
- 3 colonist cars.
- 5 first-class passenger cars.
- 46 Hart-Otis steel side dump cars (50 tons capacity).
- 371 box cars.
- 1 refrigerator car.
- 70 platform cars,
- 2 stock cars.

The eight locomotives replaced seventeen small type and have a tractive power of 219,950 lbs., or 6,444 lbs. in excess of the seventeen.

Two of the first class cars replaced two cars condemned, Nos. 8 and 21.

The 46 Hart-Otis steel side dump cars replaced 383 6-ton hoppers, which were condemned and destroyed; the 46 having a total capacity equal to the 383.

The 371 box, 1 refrigerator, 70 platform and 2 stock cars replaced the same number condemned.

The following cars were rebuilt in the shops at Moncton on Renewals account (revenue) to replace the same number condemned:—

1 colonist.
50 box.
1 refrigerator.
38 platform.
10 vans.

One milk car was built on renewals account, and two of the steam motor cars were converted into first class and baggage in the shops at Moncton; the third motor car will be converted during the coming year.

Two additional colonist cars and eight vans are under construction in the shops, and the work of changing four postal cars from postal and smoking into postal and express has also begun.

The fitting of the cars with air brakes was completed this year.

I have the honour to be, sir,
Your obedient servant,

J. J. WALKER,
Mechanical Accountant.

G. R. JOUGHINS, Esq.,
Superintendent of Motive Power, I.R.C.,
Moncton, N.B.

The following is a report of the work done in locomotive department at Moncton during the year:—

Erecting shop—

16 locomotives were partly rebuilt.
59 locomotives received general repairs.
13 locomotives received heavy repairs.
23 locomotives received light repairs.
1 locomotive was converted from compound to simple cylinder.
2 coaling cranes received general repairs.

Blacksmith shop—

2,487,585 lbs. iron forgings were made, including 1,176,340 lbs. bolts.
1,007,361 lbs. steel forgings were made.
223,700 lbs. nuts were made.

Boiler shop—

27,954 tubes were applied.
27,500 tubes were cleaned.
27,410 tubes were pieced.
54 side sheets were made.
25 door sheets were made.
35 tube sheets were made.
57 fire boxes were patched.
1 tender frame was made and 56 repaired.
115 locomotive smoke stacks were made and 27 long stacks made.
12 oil pans were made.
13 ash pans were made and 87 repaired.

2 tender tanks were made and 93 repaired.
1,370 wheels were rivetted.
5 tender bolsters were made and 62 repaired.
19 sterlingworth trucks were repaired.
1 tender was rebuilt.
36 front ends were made.
80 ashpan slides were made.
13,300 copper ferrules were made.
1,450 patch bolts were applied.
1,500 lbs. rivets were made.
56 petitcoats were made.
6 smoke box door liners were made.
2 snow ploughs were ironed.
4 steel dump cars were repaired.
82 front ends were made.
15 steel cabs were repaired.
8 pairs steel car steps were made.
7 ash buckets were made.
68 coal buckets were made.
2 water tanks were made.
81 boilers were tested.
1 water service boiler was made and 6 repaired and tested.

Pattern Shop—

The following patterns were made and repaired:—
280 for cast-iron were made and 58 repaired.
37 for steel were made and 60 repaired.
234 for brass castings were made and 31 repaired.
83 for malleable castings were made and 36 repaired.

Brass foundry—

The following was the output of this shop:—
384,846 lbs. bearings.
77,089 lbs. brass castings.
43,540 lbs. antimonial lead.
15,297 lbs. babbitt.
206 lbs. metallic packing.

Brass turning shop—

250 air gauges, 1,000 air hammers and 260 air pumps were repaired.
500 lubricators were repaired.
500 beading tubes were repaired.
50 brake cams were made.
200 brake cam nuts and 400 screws were made.
60 bell ringers were made.
100 sets dies were made.
100 cylinder cocks were made.
24 blow-off cocks were made.
96 gauge glass cocks were made.
50 try cocks were made.
8 large and 50 small tender cocks were made.
300 engines brasses were made.

25 fire hose couplings were repaired.
200 flag staff castings were made.
200 hydraulic and 50 bottle jacks were repaired.
225 heater regulators were repaired.
700 injectors were repaired.
40 injector check valves were made.
1,200 oil cups were made.
180 pump governors were repaired.
150 reamers were made.
24 steam chest release valves and 60 nipples were made.
500 steam gauges were repaired.
150 taps were made.
1,000 tube cutters were made.
150 wheel defect gauges were made.

In addition to the above all the pump governors, heater regulators, air and brake cylinders, engine valves and boiler mountings of all engines passing through the shop were overhauled, repaired and renewed.

Tin and Copper shop—

7,226 W.A.B. hose couplings were fitted to new hose.
4,209 signal and steam hose couplings were fitted to new hose.
20,144 bushes were lined.
142 headlights and 239 reflectors were repaired.
4 crane pipes were made and 18 were repaired.
28 tank pipes were made and 38 were repaired.
481 switch lamps, 57 tail lamps and 108 signal lamps were repaired and painted.
453 perforated plates were made.
144 oilers were made and 172 were repaired.
32 oil pumps and 4 oil tanks were repaired.
10 valve oil pots were made.
999 tin valve oil cup covers were made.
40 water cans were made and 101 were repaired.
166 steam gauge lamps were made and 60 were repaired.
18 water gauge lamps were made and 30 repaired.
166 shop lamps were made and 71 were repaired.
31 hand lamps were made and 8 were repaired.
42 lamp fonts were made.
16 water stacks were made.
96 coal boxes were made.
396 ventilators were made.
228 stove bases were made.
7 sinks and 7 ice boxes were made.
115 drip pans were made.
66 gauge glass shields were made.
18 cab lamps were repaired.
225 pipe oil cups were made.
3,100 sets metallic packing and 2,500 sets valve stem packing were made.

Repairing and altering copper pipes, and renewing copper pipe on steam pumps and lubricators, copper joints on steam chests, domes and cylinder covers, driving and truck boxes, repairing Westinghouse air brake pipes, and lagging removed and repaired and replaced on 115 engines.

One hundred and ten tenders were equipped with train line pipes for signal air and steam, and all water pipes were overhauled and repaired.

Repairs were made to wash basins, taps, water closets, lamps, brasswork, piping, &c., on 209 passenger and baggage cars; and 50 parlour, sleeping and dining cars; and 5 official cars.

General repairs were given to the piping, sinks, &c., on 2 auxiliary, 21 vans and 2 refrigerator cars.

Extensive repairs were made to the plumbing and heating systems in the offices and new shops at Moncton and at eleven stations along the line.

All the stoves and pipes were repaired and put up in the different stations between Moncton and Campbellton, Loggieville and Fredericton, Indiantown and Dalhousie branches, St. John and Halifax, and the Dartmouth branch.

The steam pipes were repaired and renewed at the old gas plant, and also in the yard scales at Moncton.

Ten new vans and the milk car, erected in the car shops, had all the necessary plumbing and piping done.

The piping on the air pump in the track blacksmith shop was renewed and all other piping in the shop repaired.

Two extra heating radiators were installed in the freight shed.

All piping in the pintsch gas plant was repaired and renewed where necessary.

A large amount of work was done and pipe repaired for the ss. *Scotia*.

Tender shop—

10 pilots were made.
13 wooden cabs were made and 101 were repaired.
52 cab doors were made and 225 cab sashes were made.
2 tender tanks were lengthened, 50 received general and 55 heavy repairs.
146 valves were repaired.
36 valve spindles were made and 160 were repaired.
157 running boards were made and 62 were repaired.
46 front beams and 35 back beams were made.
1,298 side curtains were made.
287 cab seats were made.
119 headlights bases were made and 28 were repaired.
442 hammer handles, 1,778 sledge handles and 46 wrench handles were made.
200 mallets were made.
254 semaphore and switch lamp bottoms were made.
146 outfit boxes were repaired.
129 tool and shipping boxes were made.
28 tender truck frames were made.
142 trucks were repaired.
14 wheel barrows were made and 73 were repaired.
5 tender frames were made and 92 were repaired.
29 quadrants were made.
34 back castings and 19 buffer beam castings were made.
11 front castings and 5 centre castings were made.
14 tender trucks were repaired.
28 tender steps were made and 60 were repaired.
44 drop curtains were made.
400 pump laggings were made.
100 flange moles were made.
18 headlights were repaired.
17 handcarts were repaired.

Machine shop—

259 new driving tires were applied and 649 were turned.
214 new engine truck tires were applied and 732 were turned.
729 new tender tires were applied and 965 were turned.
38 trailer truck tires were turned and 108 tires were shimmed.
1,199 new car tires were applied and 3,811 were turned.
161 driving journals were trued up and 318 hubs were faced.
14 crossheads were made and 138 replaned.
85 cylinder heads were made.
78 piston rods were trued up and 54 pistons were made.
15 cylinders and half saddles were made.
16 engine truck centres were made.
41 guide bars and 94 guide blocks were made.
273 driving wedges were made.
13 locomotive frames were machined.
158 pop valves and 102 whistles were repaired.
77 steam chests were made.
9 steam chest covers were made and 6 were repaired.
51 gas retorts were machined.
10 cylinder bushes were bored out and fitted.
31 engine truck boxes were made.
570 wedges were replaned.
35 tender axles, 22 driving axles and 96 car axles were fitted.
3 trailer axles and 9 engine truck axles were fitted.
4,904 new and second hand axles were turned.
47 smoke door boxes and rings were made.
29 crank pins were made.
46,300 stay bolts were threaded and 10,550 were made.
19,500 turned bolts and 1,330,750 forged bolts were threaded.
2,402 studs were made and 6,601 were turned.
302,700 nuts were tapped and 104,000 were faced.
61 cylinder heads and 11 crossheads were made.
260 driving boxes were planed and fitted.
4 engine-truck housings were made.
11 eccentric pulleys were made.
3 dome castings were made.
8,054 chilled wheels were bored and pressed on axles.
13,562 wheels were pressed off axles.
4,835 second-hand chilled wheels were bored and pressed on axles.
285 steel tired wheels were bored and pressed on axles.
12 new and 9 old steel wheels were bored out.
9 trailer truck extensions were made.
2 engine-truck bolsters were made.
12 steel rollers were made.
5 gears for snow ploughs were made.
65 driving brasses were slotted.
16 fire-box doors were made.

Motion shop—

3 links were made.
143 link-pins, blocks and bushes were repaired.
40 link blocks were made.

5 link hangers were made and 164 were repaired.
48 eccentric rods were made and 262 were repaired and pins fitted.
51 equalizing bars were repaired.
78 reversing shafts were trued up and pins and bushes fitted.
28 reversing shaft boxes were made and 149 were repaired.
89 reversing liners were overhauled and pins and bushes fitted.
51 reversing liner pawls were made and 79 were repaired.
95 reversing reach-rods were repaired and pins fitted.
37 valves were made.
141 valves were faced and yokes fitted.
91 valve rod keys were made.
90 valve stems were fitted to yokes.
58 valve heads were faced.
53 valve division rings were made.
419 valve packings were machined and fitted.
63 valve guide boxes were bushed.
73 throttle-rods were repaired and 35 ends were fitted.
73 throttle-glands were bushed.
87 throttle-levers were fitted up with quadrants, springs and pins.
205 big end brasses were machined and fitted.
72 old big end brasses were machined and fitted.
159 small end brasses were made and fitted.
168 main rod liners were made and fitted.
166 big end keys were made.
416 side rod bolts and 491 nuts were made.
525 side rod brasses were made and fitted and 353 were machined and fitted.
752 knuckle-joint pins and bushes were made.
157 crossheads were trued and keys fitted.
135 crosshead pins were made.
103 piston rods were machined and keys fitted.
26 rocker boxes were made and 59 were relined.
133 rocker-box bushes were fitted.
226 hub plates were made and applied.
278 driving-box brasses were made and applied.
252 driving-box brasses were relined and applied.
31 driving boxes were made.
496 driving boxes were bored and fitted to axles.
229 spring guards were machined and applied.
105 eccentric straps were made and 139 were rebored and fitted.
90 eccentric pulleys were made and 82 were rebored and fitted.
3 rocker arms were made and 43 were turned.
16 elvin-grease spring plates were applied.
26 valve bushes were fitted to steam chest.
6 new ends were applied to valve rods.
120 eccentric keys were made.
6 passover valves were turned.
84 knuckle-pin nuts were finished.
46 crank-pin caps and nuts were made.
126 crank-pin washers were faced.
140 eccentric feathers were machined.
16 eccentric rod-jaws were made.
4 reach rod jaws were made.
31 valve yoke stems were trued up.
90 reversing lever springs were made.

Electrical shops—

25 Pyle National headlights were repaired.
65 armatures were repaired and 15 were rewound.
18 cabs were wired for lights.
10 direct current and 18 alternating current motors were repaired.
8 motors were installed and 12 were changed.
150 Tungsten and 1,600 carbon lamps were renewed.
500 feet flexible cord were installed.
1,000 feet extension cord were replaced.
97 controllers were repaired.
7 cranes were repaired.
37 cooper hewitt tubes were replaced and 27 lamps were repaired.
2 gas engines were repaired.

The following special work was done—

Six 8-foot shop turntables were installed in the shops.
Three motor-car boilers were dismantled and removed from cars.
One jib crane was rebuilt and one was repaired.
One boring mill and one key-seat milling machine were installed.
A coal elevator was installed in the gas-house.
A new platform was erected for wheeling coke and ashes to and from the gas-house.
An elevated platform was constructed for wheeling ashes on cars from the boiler-room.
The rotary scrubber in old unit of gas-house was given a heavy repair.
Six cast-iron rolls were put in planing mill with concrete foundations.
Motor changed on large shears in Blacksmith shop.
Heavy repairs were made to feed water-heater for St. John.
100 feet of blast pipe installed in blacksmith shop and trench dug for same.
Heating engines in the different shops were overhauled and repaired.
Tar pump was installed in pintsch gas plant.
Air ducts installed in connection with the heating system in shops.
Two ventilators were installed on power-house roof.
Twelve beds were made of $1\frac{1}{4}$-inch pipe for trainmen's rest-house at Campbellton.

The following is a report of the work done in car department at Moncton during the year:—

The following car was built:—

1 milk car.

The following cars were rebuilt:—

1 colonist car.
1 refrigerator car.
10 vans.
50 box.
38 platform.
2 motor cars were remodelled to first-class and baggage.

The following cars received general repairs:—

4 sleeping cars.
5 second-class.
4 postal.
2 box baggage.
491 freight.
2 flangers.
12 first-class.

3 colonist.
7 baggage.
63 vans.
13 snow ploughs.

The following cars received medium repairs:—
21 sleeping.
6 dining.
62 first-class.
38 colonist.
9 postal.
1 auxiliary.
1 crane.
8 parlor.
1 official.
34 second-class.
19 vans.
31 baggage.
519 freight.

The following cars received light repairs:—
27 sleeping.
27 official.
62 second-class.
18 postal.
4 vans.
1 pintsch gas.
12 dining.
77 first-class.
35 colonist.
37 baggage.
1 auxiliary.
12,406 freight.

The following cars were burnt off, painted, lettered and varnished:—
17 sleeping.
1 official.
10 second-class.
4 postal.
30 vans.
4 dining.
51 first-class.
22 colonist.
12 Baggage.

The following cars were cleaned, cut in and varnished:—
5 sleeping.
3 dining.
27 second-class.
29 baggage.
8 parlor.
30 first-class.
17 colonist.
9 postal.

The following rolling stock was lettered, painted, varnished and stencilled, &c.:—

141 box cars.
26 refrigerator cars.
4 auxiliary cars.
7 snow ploughs.
3 flangers.
54 tenders.
137 platform cars.
40 gondola cars.
5 hopper cars.
26 tank cars.
64 engines.
10 pilots.
930 box cars had the paint and lettering touched up.
87 passenger cars were reweighed and stencilled.

Also a number of ash-buckets, ladders, wheel-barrows, doors, steampipes, desks and tops, chairs, stools, smokestacks, iron safes, sign-boards, bulletin-boards, and various other articles were painted and lettered.

Freight car shop—

203 freight car trucks were built.
204 acme levers were applied to freight cars.
203 new roofs were applied to freight cars.

Woodworking mill—

31 pilots were built.
1,628 buffer blocks were made.
988 brake-beams and 2,019 draft timbers were made.
702 truck sides and 576 truck bolsters were made.
437 spring-boards were made.
1,311 orders for material for outside stores were completed.
2,797,931 feet of lumber was milled.

Upholstering shop—

50 passenger cars received heavy repairs, such as renewing the upholstery, blinds, carpets, mattresses, &c.
16 passenger cars received medium repairs, such as seats and backs washed, mattresses and carpets air-blown, and renewing seats, backs, blinds, &c.
76 passenger cars received light repairs, such as seats and backs, mattresses, carpets, wicker chairs air-blown, and patching and repairing done.
544 engine curtains were made.
484 cab seats and backs were made.
2 car window blinds and 13 car aisle strips were made.
217 van seats were upholstered.
12 coal and 48 hose bags were made.
12 campstools were covered.
27 hair mattresses were made.
76 morroculine mattresses and pillows were made.

Also a large number of small jobs were done such as upholstering office chairs, seats and backs, and repairing vestibule curtains, flags, window blinds and desk top covers.

Cabinet shop—

The following articles were made in the cabinet shop:—

25 head rests.
16 sleeping boxes.
27 stepladders.
12 card boxes.
12 outfit and tool boxes.
18 end panels.
6 vestibule doors.
2 passenger car doors.
6 cupboard doors.
11 door frames.
4 bulletin-boards.
200 art sash heads.
98 stools.
14 desks.
286 step ends.
7 sleeping berths.
16 closet seats.
15 basin fronts.
22 camp chairs.
8 filing cases.
1 van door.
12 stock doors.
4 closet doors.
2 large shop water coolers.
3 train safes.
8 tables.
81 seat-backs.
76 mirror frames.
17 head boards.
14 desk drawers.
3 assorting tables.
4 basin doors.
2 large ladders.
84 shop ventilators.

The following material was repaired in the cabinet shop:—

11 stools.
2 step-ladders.
16 doors.
15 tables.
7 drawers.
11 vestibule traps.
13 desks.
8 van sleeping bunks.
8 pigeon-hole cases.
30 wash basins.
52 seat-backs.
29 seat-bottoms.
76 dining and office chairs.
28 shelves.
13 train safes.
4 outfit boxes.
9 head-boards.

In addition to the above a large amount of labour and material was supplied in repairing office doors, locks, desks and tops, drawers, window sashes, hanging pictures and notices, &c.

A large amount of material was also turned out for the three colonist cars under construction, and for converting the four postal and smoking cars into postal and express cars, and for converting the two motor cars into first-class and baggage cars.

The bunks, tables, desks and sashes, and all inside fittings for the ten vans were made; and a large amount of work was done and material made for equipping the 18 sleeping cars with new steampipes and pillow boxes.

Special work—

1,405 freight cars had the F-36 triple valve removed and were equipped with the new style K-1 triple.

The following special work was also done:—

MONCTON.

384 fire extinguishers were purchased to be placed in passenger cars.

135 emergency tool boxes were made in the shops and equipped with tools, and 58 of these were put in place in passenger cars.

About all the material has been purchased for one drop pit for the shops.

About $1,000 was spent in laying one of three tracks and doing part of the grading for a site for scrap bins for the shops. This also covers two transfer trolleys, which were built in the shops for use at the scrap bins when completed.

Two hydraulagraphs (for recording the pressure at which a locomotive or car wheel is put on its axle) were purchased and received.

One air-brake triple-valve testing rack, of the latest pattern, was purchased and installed in the shops; the old one was removed and sent to the Charlottetown shops.

1,000 feet of fire-hose, 2 shut-off nozzles, 5 ladders, 2 fire-hose sleds and 2 fire-hose carts were purchased and put into commission about the shops.

One oxy-acetylene welding and cutting plant was purchased and installed complete in the shops.

Five buzz planers in the shops were equipped with safety cylinders to prevent serious mutilation of workmen's hands in case of accident.

Two hydrants were placed in the lumber yard, one 200 feet and the other 600 feet from the nearest hydrant in the yard. This enables our fire department to reach any part of the lumber yard with water quickly and with not more than 400 feet of hose.

The automatic rivet and track bolt machine was installed, and parts of the furnace for it were purchased, but furnace was not completed as all the parts were not received.

A carpet sewing machine and a carpet binding machine were purchased and installed complete.

A six-seat closet and two nine-seat closets, six urinals, and ten wash sinks were installed complete in different parts of the shops.

Two jib cranes, which were purchased the previous year, were received and installed complete.

Work was completed on about 2,400 feet of planking between the rails of the narrow-gauge tracks at the end of the freight car repair shop.

A planer and matcher, a saw bench and a buzz planer were installed complete on concrete foundations with individual electric motors in the cabinet shop.

A nut-burring machine was received and installed, but proved to be useless and has not been accepted and is therefore not in use.

CAMPBELLTON.

A drop pit was purchased and installed in the engine house for removing wheels from locomotives and cars.

ST. JOHN.

A new return tubular boiler, a duplicate of the two now there, was purchased and installed in the power house of the St. John elevator. A new feed pump was also purchased and installed. One of the second-hand 105 K.W. lighting generators was brought from Moncton and installed in the power house; this generator now does all the Intercolonial lighting at Island yard and St. John, thus cutting out the old plants at the round-house and at the elevator and making it unnecessary to purchase electricity from the city except in an emergency.

PRINCE EDWARD ISLAND RAILWAY.

Fifteen 30-ton coal cars were built complete. A large amount of the material was got out at the Moncton shops and shipped to Charlottetown and the fifteen cars were built in the shops there.

One tank car was built at the Charlottetown shops, the tank having been made at the Moncton shops.

SS. 'SCOTIA.'

One 18-inch crank shaper, one 5 H.P. engine, and one emery grinder with a 16-ft. length of shafting were installed for the use of the engineers in effecting light repairs to the engines or machinery.

WATER SERVICE.

This service has been maintained in efficient condition during the year over the whole line.

HALIFAX SHOPS.

The following regular work was done during the year in the shops:—

3 locomotives received heavy and 163 specific repairs.
1 locomotive received new tubes.
20 boilers were tested.
4 sets driving tires were turned off.
4 sets engine truck tires were turned off.
11,140 bolts were forged.
12,560 bolts were screwed.
1,035 studs were screwed.
3 engines and tenders were painted.
208 sets metallic rod packing were made.
195 sets valve stem packing were made.

A large number of freight cars received light repairs, and a number of jobs were done for the Maintenance and Traffic departments.

The following special work was done:—

One drop pit for removing wheels in pairs from under cars was installed in the car shop.

A number of small tools such as dies, taps, reamers, vices, benches, drills, saws, &c., were purchased for the new shops and put in use.

One air-brake triple-valve testing rack was purchased and installed in the car shop.

RIVIERE DU LOUP SHOPS.

The following regular work was done in the shops during the year:—

24 locomotives received general, 9 heavy, 25 light and 29 specific repairs.
612 new tubes were applied and 6,975 were pieced.
17 fire boxes were patched.
79 boilers were tested.
151 driving tires were turned off.
47 engine truck tires were turned off.
170 tender truck tires were turned off.
10 trailer tires were turned off.
1 new cab was made.
23 pilots were made.
13,757 bolts were forged and 26,166 were screwed.
2,808 studs were screwed.
43 engines and tenders were painted.
42,158 lbs. brass castings were made.
2,561 sets metallic and 2,819 sets valve stem packing were made.
34,127 lbs. iron forgings were made.
34 driving springs were made and 480 were repaired.
22 engine truck springs were made and 59 were repaired.
32 tender truck springs were repaired.

A large number of cars received light repairs during the year, and a lot of jobs were done for other departments of the railway.

The following special work was done:—

The vote for grading a site and providing a transfer trolley for scrap bins was expended.

Four anvils, one twist drill grinder, one tube cutter, three emery wheel grinders; and a number of smaller tools, such as dies, taps, reamers, drills, vices, wrenches, saws, &c., were purchased and put in use in the shops.

INTERCOLONIAL RAILWAY OF CANADA

STATEMENT showing the number of Locomotives and the different classes of other Rolling Stock on the line on March 31, 1911, and March 31, 1912.

	Locomotives.	Sleeping cars.	Parlor cars.	Dining cars.	Colonist cars.	First class passenger cars.	Second class passenger cars.	Postal cars.	Baggage cars.	Box baggage cars.	Air brake instruction car.	Steam motor cars.	Box cars.	Refrigerator cars.	Platform cars.	Pulpwood cars.	Oil tank cars.	Hopper cars.	Gondola cars.	Coal cars (20 ton).	Steel side dump cars, (coal, 50 ton).	Stock cars.	Convertible dump cars.	Auxiliary cars.	Vans.	Stores supply car.	Pintsch gas car.	Total cars.	Common snow ploughs.	Wing ploughs.	Rotary steam ploughs.	Double track ploughs.	Double end ploughs.	Flangers.	Total ploughs and flangers.	Steam cranes.	Ballast plough cars.	Well boring car.
On hand serviceable and repairing March 31, 1911	396	41	9	12	49	132	90	34	66	6	1	4	6636	142	2915	50	40	839	5	427	130	146	199	23	107	1	1	12105	52	20	2	2	1	40	117	15	2	1
To be replaced on March 31, 1911	1	..	..	..	1	3	9	..	..	..	..	..	459	2	142	2	..	207	12	15	....	2	1	..	12	..	..	867	1	..	..	..	..	1	2	..	..	..
Total equipment, March 31, 1911	397	41	9	12	50	135	99	34	66	6	1	4	7095	144	3057	52	40	1046	17	442	130	148	200	23	119	1	1	12972	53	20	2	2	1	41	119	15	2	1
Purchased during the year on capital account	4	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	15	..	..	..	..	..	..	..	..	..	..	17	..	..	..	..	..	..	..	..	..	..
Purchased during the year on renewals account	..	..	..	..	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..	..	..	..	..	..	..	..	..
Built in shops Moncton on renewals account (milk)	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Converted in the shops from motor to 1st class and baggage and transferred to 1st class series	..	..	..	..	..	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Purchased during the year on renewals account to replace 383-6 ton hoppers condemned, the 46-50 ton cars having a capacity equal to the 383 hoppers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	46	..	..	..	..	..	..	46	..	..	..	..	..	..	..	..	..	..
Deduct 383-6 ton hoppers replaced by the 46-50 ton cars shown above	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	383	..	..	..	..	..	..	..	..	..	383	..	..	..	..	..	..	..	..	..	..
Purchased during the year on renewals account to replace 17 old small type locomotives	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Deduct 17 old small type locomotives replaced by the 8 shown																																					

| | | |

INTERCOLONIAL RAILWAY OF CANADA.

STATEMENT of Mileage and Coal, Oil, Grease and Waste consumed by Locomotives for the year ended March 31, 1912.

Months.	Locomotive Mileage.	Consumption.					Average consumption per 100 Miles.				
		Tons of Coal.	Pints of Valve Oil.	Pints of Engine Oil.	Pounds of wool waste.	Pounds of Grease.	Pounds of Coal.	Pints of Valve Oil.	Pints of Engine Oil.	Pounds of wool Waste.	Pounds of Grease.
1911.											
April	802,720	48,257	11,402	25,237	1,161	3,754	13,466	1·42	3·14	·14	·46
May	734,964	39,091	10,671	23,183	882	3,094	11,914	1·45	3·15	·12	·42
June	737,466	38,552	10,973	23,389	855	3,687	11,709	1·49	3·17	·11	·50
July	746,080	38,319	10,333	22,915	527	3,566	11,504	1·38	3·07	·07	·48
August	768,294	40,621	10,808	23,684	972	3,521	11,843	1·40	3·08	·12	·46
September	740,079	41,154	10,468	22,431	891	3,295	12,456	1·41	3·03	·12	·44
October	778,974	45,364	10,901	23,241	808	3,327	13,045	1·40	2·98	·10	·42
November	770,286	48,263	11,339	22,812	911	3,691	14,035	1·47	2·96	·12	·48
December	844,172	55,447	12,751	25,625	953	3,333	14,713	1·51	3·03	·11	·39
1912.											
January	822,243	56,392	11,854	23,857	782	3,564	15,362	1·44	2·90	·09	·43
February	811,838	52,424	11,869	24,441	897	3,977	14,464	1·46	3·01	·11	·49
March	858,371	55,026	13,600	25,579	1,123	4,968	14,359	1·58	2·98	·13	·58
Total	9,415,487	558,910	136,969	286,394	10,762	43,777	13,296	1·45	3·04	·11	·46

STATEMENT OF CAPITAL ACCOUNT

No. 1.—INTERCOLONIAL RAILWAY.

Capital Account. Year ended March 31, 1912.

1911.	Dr.	$ cts.	$ cts.	1911.	Cr.	$ cts.
March 31.	To cost of Intercolonial Railway to date		93,035,371 08	March 31.	By Dominion of Canada	93,035,371 08
	Strengthen Bridges	53,551 40				
	Increase accommodation at Halifax	73,989 59				
	Equipment at Rivière du Loup engine house	6,645 41				
	Locomotive and Car Shops with equipment and new freight yard and cut off line at Moncton	106,936 31				
	Increase accommodation at Campbellton	176,810 41				
	Sydney Mines diversion	249,929 45				
	Diversion of line at Chatham and Branch to wharf	210,563 93				
	Addition to General office building, Moncton	80,626 67				
	Increase accommodation at Truro	24,951 14				
	Double tracking at New Glasgow	26,069 15				
	General Protection of highways	114,266 28				
	Increase accommodation at Stellarton	30,000 00				
	Increase accommodation and facilities along the line	50,952 23				
	Increase accommodation at St. John	25,600 00				
	Surveys and Inspection	264 69				
	Increase accommodation at Fredericton	42,978 63				
	Towards the construction of a railway from a point on the Intercolonial Railway at or near Dartmouth, in the County of Halifax, via Musquodoboit Harbour and the Valley of the Musquodoboit to Deans Settlement, in the said County	24,696 31				
	Towards the construction of a railway from a point on the Intercolonial Railway at or near Alba, in the County of Inverness, to the town of Baddeck, in the County of Victoria	11,121 01				
	Towards the construction of a railway from a point on the Intercolonial Railway at or near New Glasgow, in the County of Pictou, to the town of Guysboro, and from the said line of railway at Cross Roads Country Harbour to the deep water of the said harbour	113,406 49				
	Additional facilities at Princess Pier	15 05				
	Improvements at Mulgrave	28,961 12				

Rolling Stock	128,485 13				
Air brakes to freight cars	12,160 00				
Original construction	175 96				
Equip passengers cars with fire extinguishers and tool boxes	6,400 00				
Docks and wharves at Halifax	98,898 72				
Improve triple valves of air brakes	7,150 00				
Construction of spur line from Hampton Station to Hampton Village	1,711 08		1912.		
New machinery for steamer "Scotia"	832 68				
Exchange of draw bars of freight cars	1,999 72		March 31.	By Dominion of Canada	1,710,448 56
		1,710,448 56			
		$94,745,819 64			$94,745,819 64

E. and O. E.
Moncton, N. B.

S. L. SHANNON,
Comptroller and Treasurer.

No. 2.—INTERCOLONIAL RAILWAY.

Revenue Account. Year ended March 31, 1912.

Expenditure.	$ cts.	$ cts.	Earnings.	$ cts.
Maintenance of Way and Structures..		1,812,419 58	Passenger earnings...	3,017,304 63
Maintenance of Equipment	2,144,723 58		Freight earnings.....	7,008,300 49
Add surplus for year transferred to Renewal of Equipment and Debited to this Account.....	536,819 69	2,681,543 27	Mail & Express earnings.	428,985 64
Traffic expenses.....		217,943 10	Miscellan. earnings..	139,195 08
Transportation expenses.....		5,630,139 19		
General expenses.....		248,990 70		
Balance.....	539,569 69			
Less surplus tranferred to renewal of Equipment Account.....	536,819 69	2,750 00		
		10,593,785 84		10,593,785 84

S. L. SHANNON,
Comptroller and Treasurer.

E. & O. E.
Moncton, N. B.

No. 3.—INTERCOLONIAL RAILWAY.

Maintenance of Way and Structures. Year ended March 31, 1912.

		$ cts.
No. 1.	Superintendence	53,267 59
" 2.	Ballast.....	61,628 25
" 3.	Ties.....	143,054 44
" 4.	Rails.	158,368 09
" 5.	Other Track Material.....	102,509 00
" 6.	Roadway and Track.....	682,852 02
" 7.	Removal of snow, sand and ice.....	151,580 68
" 9.	Bridges, trestles and culverts.....	44,317 77
" 10.	Over and under grade crossings	1,119 36
" 11.	Grade crossings, fences, cattle guards and signs	47,918 38
" 12.	Snow and sand fences and snow sheds.....	16,248 69
" 13.	Signals and interlocking plants.....	6,170 19
" 14.	Telegraph and Telephone Lines.....	1,520 92
" 16.	Buildings, Fixtures and Grounds	265,442 74
" 17.	Docks and Wharves.....	29,871 77
" 18.	Roadway Tools and Supplies.....	21,992 75
" 22.	Injuries to Persons..	355 68
" 23.	Stationery and Printing.....	3,936 66
" 25.	Other Expenses.....	866 49
" 26.	Maintaining joint tracks, yards and other facilities—Dr.....	27,847 77
	Cr.....	1,820,869 24
" 27.	Maintaining joint tracks, yards and other facilities—Cr.....	8,449 66
		1,812,419 58

S. L. SHANNON,
Comptroller and Treasurer.

E. & O. E
Moncton, N. B.

No. 4.—INTERCOLONIAL RAILWAY.

Maintenance of Equipment. Year ended March 31, 1912.

		$ cts.
No. 28.	Superintendence	59,135 90
" 29.	Steam Locomotives	712,227 89
" 30.	Steam Locomotives—Renewals	371,965 84
" 35.	Passenger Train Cars—Repairs	294,183 31
" 36.	" " Renewals	185,977 91
" 38.	Freight Train Cars—Repairs	635,784 28
" 39.	" " Renewals	278,939 95
" 44.	Floating Equipment—Repairs	9,058 20
" 45.	" " Renewals	2 00
" 47.	Shop Machinery and Tools	40,376 27
" 49.	Injuries to Persons	498 08
" 50.	Stationery and Printing	10,786 32
" 51.	Maintaining Joint Equipment at Terminals—Dr.	4,506 23
" 52.	Other Expenses	43,899 34
" 53.	Work Equipment—Repairs	34,201 75
		*2,681,543 27

* From the operation of the Railway for the year there was a gain of $539,569.69, and of this amount $536,819.69 was transferred to Equipment Renewal Account, and Maintenance of Equipment was charged with same. The amount of $536,819.69 is available for the purchase of Rolling Stock.

E. & O. E.

Moncton, N. B.

S. L. SHANNON,

Comptroller and Treasurer.

No. 5.—INTERCOLONIAL RAILWAY.

Traffic Expenses. Year ended March 31, 1912.

		$ cts.
No. 57	Superintendence	63,776 92
" 58	Outside Agencies	71,806 24
" 59	Advertising	48,605 81
" 60	Stationery and Printing	30,264 85
" 61	Traffic Associations	2,693 29
" 65	Other Expenses	795 99
		217,943 10

E. & O. E.

Moncton, N. B.

S. L. SHANNON,

Comptroller and Treasurer.

No. 6.—INTERCOLONIAL RAILWAY.

Transportation Expenses. Year ended March 31, 1912.

		$ cts.
No. 66	Superintendence	83,169 76
67	Despatching trains	166,045 42
68	Station employees	737,227 00
69	Weighing and car service associations	1,427 36
72	Station supplies and expenses	102,350 23
73	Yardmasters and their clerks	41,585 22
74	Yard conductors and brakemen	179,486 73
75	Yard, switch and signal tenders	16,225 28
76	Yard supplies and expenses	19,719 43
77	Yard enginemen	139,914 24
78	Enginehouse expenses—Yard	35,841 70
79	Fuel for yard locomotives	195,501 63
80	Water for yard locomotives	10,969 46
81	Lubricants for yard locomotives	3,435 18
82	Other supplies for yard locomotives	2,297 59
83	Operating joint yard and terminals—Dr	114,681 95
86	Road enginemen	576,983 86
87	Enginehouse expenses—Road	279,210 08
88	Fuel for road locomotives	1,693,269 67
89	Water for road locomotives	55,289 78
90	Lubricants for road locomotives	28,554 25
91	Other supplies for road locomotives	16,954 87
94	Road trainmen	767,240 85
95	Train supplies and expenses	196,358 39
96	Interlockers, block and other signals—Operation	10,409 67
97	Crossing flagmen and gatemen	15,256 90
98	Drawbridge operation	3,185 39
99	Clearing wrecks	17,287 73
100	Telegraph and telephones—Operation	13,217 17
101	Operating floating equipment	49,350 06
103	Stationery and printing	62,892 40
105	Other expenses	27,668 45
106	Loss and damage—Freight	40,030 04
107	Loss and damage—Baggage	287 83
108	Damage to property	5,961 29
109	Damage to stock on right of way	5,690 83
110	Injuries to persons	2,211 49
111	Operating joint tracks—Dr	11,343 98
		5,728,533 16
	Cr.	
No. 84	Operating joint yards and terminals—Cr	98,393 97
		5,630,139 19

E. & O. E.
Moncton, N. B.

S. L. SHANNON,
Comptroller and Treasurer.

No. 7.—INTERCOLONIAL. RAILWAY.

General Expenses. Year ended March 31, 1912.

		$ cts.
No. 113	Salaries and expenses of general officers	25,937 47
114	Salaries and expenses of clerks and attendants	103,943 75
115	General offices supplies and expenses	2,946 93
116	Law expenses	12,143 85
118	Relief Department expenses	9,399 96
119	Pensions	76,371 60
120	Stationery and printing	14,475 71
121	Other expenses	3,771 43
		248,990 70

E. & O. E.
Moncton, N. B.

S. L. SHANNON,
Comptroller and Treasurer.

No. 8.—INTERCOLONIAL RAILWAY OF CANADA.

General Stores Account. Year ended March 31, 1912.

Dr.	$ cts.	$ cts.	Cr.	$ cts.	$ cts.
To balance, March 31, 1911		1,149,303 45	By issues during year ended March 31, 1912	4,192,961 31	
Purchases during year ended March 31, 1912	3,710,077 38		Sales, material, fuel, &c.	62,299 31	
Charges from other departments	908,084 12		Sales old material	220,118 18	
Labour	56,946 04				4,475,378 80
Staff	30,678 40				
		4,705,785 94	Balance—		
			Ordinary stores, including fuel	758,731 68	
			Roadway and bridge material	620,978 91	
					1,379,710 59
		5,855,089 39			5,855,089 39

S. L. SHANNON,
Comptroller and Treasurer.

C. F. BURNS,
Auditor of Disbursements, I.R.C.

MONCTON, N.B.

No. 9.—INTERCOLONIAL RAILWAY.

General Balance. Year ended March 31, 1912.

Dr.	$ cts.	$ cts.
To Cash	2 33	
General Stores	1,379,710 59	
Station Agents	201,591 96	
Receiver General—Provident Fund Account	791,316 27	
Cash in Transit Account	6,583 50	
Auditors Suspense Account	39,963 08	
Commissary Account	21,866 21	
Expenditures for Rd. and Equipment Suspense	99,639 82	
Unclaimed Freight	346 06	
		2,541,019 82
To Individuals and Companies Ledger		
Acadia Coal Co	642 75	
Alabama and Vicksburg Ry	3 99	
Atlantic Coast Line	19 43	
H. and A. Allan	462 50	
Atlantic and Lake Superior Ry	2,359 70	
Atlanta, Birmingham and Atlantic Ry	3 67	
American Refrigerator Transportation Co	0 91	
Atcheson, Topeka and Santa Fe Ry	10 01	
Ann Arbor Ry	2 61	
Alabama Great Southern Ry	14 20	
Steamship 'Amelia'	0 70	
Austin Lumber Co	272 46	
Atlanta & West Point Ry	8 00	
Boston & Maine Ry	421 94	
Baltimore & Ohio Ry	128 47	
Boston & Albany Ry	2 24	
Bangor & Aroostook Ry	7 66	
Buffalo, Rochester & Pittsburg Ry	58 76	
Buffalo & Susquehanna Ry	10 54	
Bessemer & Lake Erie Ry	2 54	
Bathurst Lumber Co	116 49	
Brown Machine Co	314 14	
Barre Ry	9 29	
Caraquet Ry	14,895 72	
Canadian Express Co	15,524 22	
Canadian Pacific Ry	33,409 36	
Charlottetown Steam Navigation Co	223 05	
Central Vermont Ry	160 27	
Coal & Coke Co	0 44	
Canadian Northern Ry	1,657 53	

Cr.	$ cts.	$ cts.
By Dominion of Canada	1,721,441 63	
Intercolonial & Prince Edward Island Railways employees Provident Fund	309,234 71	
Equipment renewal account balance Mar. 31 1912	229,130 75	
Transfer of part surplus for year ending March 31, 1912	536,819 69	
		765,950 44
By Freight in Transit Account	15,136 67	
Rail Renewal Account	160,784 80	
Fire Renewal Account	56,269 40	
Individuals and Companies Ledger		3,028,817 65
Armour Car Lines	6 25	
Amherst Malleable Iron Co	40 42	
Beersville Ry. & Coal Co	216 20	
J. H. Brownell	235 72	
Cumberland Ry. & Coal Co	141 55	
Chatham Ry	0 07	
Chappell Bros	71 00	
Canadian Locomotive Co	91 00	
Canadian Oil Co	175 35	
J. & A. Culligan	10 20	
Colonial Granite Co	94 00	
Cornwall & York Cotton Mills Co	190 78	
Crédit Foncier Canadien	113 25	
Crosby Molasses Co	242 95	
Canada Cement Co	83 70	
Department of Justice	1,000 00	
Dubs & Co	98 63	
G. Dumont	27 00	
W. H. Duffy	288 85	
Elmsdale Co	1,190 18	
Frankell Bros	20 41	
T. E. Fernald & Co	223 50	
Grand Lake Lumber Co	383 00	
General Store Keeper	6 78	
Guilford & Sons	200 00	
H. J. Garson & Co	1,630 99	
Luther Goodspeed & Son	224 94	
Abner Gordon	161 79	
Chas & Davidson Hill	359 81	
T. A. Hurley	168 09	
Imperial Oil Co	9 40	
Jones & Schofield	111 96	
J. A. Kirkpatrick	248 50	
I. Lord	3 50	

To	Cincinnati, Hamilton, and Dayton Ry	13 45			
	Cleveland, Cincinnati, Chicago & St. Louis Ry.	147 23			
	Canada Atlantic and Plant Line	2 00			
	Chicago, Milwaukee and St. Paul Ry	89 86			
	Chicago, St. Paul, Minneapolis and Omaha Ry.	2 68			
	Cincinnati Northern Ry	25 76			
	Chicago and North Western Ry	92 61			
	Canada Railway News Co.	67 50			
	Chicago and Alton Ry	23 36			
	Chicago, Rock Island and Gulf Ry	16 65			
	Chicago, Burlington and Quincy Ry	54 16			
	Chicago Refrigerator Despatch Line	0 44			
	Central Ry. of New Jersey	86 90			
	Chesapeake and Ohio Ry	57 90			
	Chicago and Eastern Illinois Ry	20 31			
	Cleveland, Akron and Columbus Ry	1 60			
	Central Ontario Ry	5 01			
	Chicago, Indianapolis and Louisville Ry	0 57			
	Chicago, Cincinnati and Louisville Ry	1 26			
	Chicago, Indiana and Southern Ry	17 22			
	Colchester Coal and Railway Co	369 35			
	Chicago, Rock Island and Pacific Ry	64 71			
	Chicago, Great Western Ry	32 91			
	Central Indiana Ry	11 50			
	Chicago, Peoria and St. Louis Ry	0 44			
	Cold Blast Transportation Co.	0 48			
	Copper Crown Co	45 13			
	Central of Georgia Ry	9 43			
	Frank A. Cutting Co.	3 30			
	Consolidated Rolling Stock Co	1 10			
	Cleveland Provision Co.	2 27			
	Canada & Gulf Terminal Ry	5,985 53			
	Cudahy Milwaukee Refrigerator Line	4 88			
	Canadian Car and Foundry Co	7,897 10			
	Chaleur Bay Mills	12 12			
	Chicago, Milwaukee and Gary Ry	8 08			
	Carolina, Clinchfield and Ohio Ry	1 80			
	Dept. of Agriculture	70 00			
		85,990 19			
	Carried forward		2,541,019 82		

By	W. S. Loggie & Co	296 77			
	Joseph LeCours	138 05			
	J. A. Likely	1,033 80			
	Thomas Lahey	241 57			
	La Cie Manufacture de Montmagny	279 59			
	Nap. Mercier	43 50			
	F. M. Murray	272 27			
	D. H. McKay	88 07			
	W. A. McKay & Co.	138 00			
	McLean Milling Co	616 08			
	H. D. McLean	69 48			
	D. McNeil & Sons	144 77			
	H. E McArthur	445 60			
	New Brunswick Telephone Co	14 62			
	James R. Porter	49 50			
	Pratt Bros.	267 15			
	James Pender & Co.	435 77			
	Quebec Construction Co	51 44			
	Reed Co	316 66			
	Rood and McGregor	47 00			
	Sessenwein Bros	3,515 05			
	J. Simon	6,486 36			
	Enoch Steeves	258 25			
	Starr Manufacturing Co.	30 00			
	Jas. Stevenson	216 32			
	C. P. Stephen	78 50			
	Stephen Bros	193 14			
	B. L. Tucker	184 69			
	Town of New Glasgow	204 00			
	S. E. Vaughan & Co	891 00			
	Alex. Watson	356 00			
	York & Sunbury Milling Co.	197 45			
			25,670 22		
By	Individuals and Companies Ledger, Suspense :				
	Canada Car and Foundry Co	359 10			
	Nova Scotia Car Works	215 80			
	Sessenwein Bros	3,600 01			
	Salisbury and Harvey Ry.	5,887 17			
	John Simon	2,427 13			
	Windsor Branch Ry	75 34			
			12,504 55		
By	Traffic Ledger :—				
	Atchison, Topeka and Santa Fé Ry	169 19			
	Boston and Maine Ry.	2,849 53			
	Boston and Albany Ry	12 42			
	Canada Atlantic and Plant Steamship Line	61 42			
			3,092 47		
	Carried forward			3,067,052 42	

No. 9.—INTERCOLONIAL RAILWAY—*Continued.*

General Balance. Year ended March 31, 1912—*Continued.*

Dr.	$ cts.	$ cts.
Brought forward	85,990 19	2,541,019 82
To Department of Public Works	1,707 77	
Dept. of Marine and Fisheries	27 94	
Dept. of Militia and Defence	16,904 56	
Dominion Atlantic Ry	4,934 20	
Dominion Coal Co	127 94	
Dominion Iron & Steel Co	11,699 67	
Delaware & Hudson Ry	148 93	
Delaware, Lackawanna & Western Ry	51 97	
Dominion Express Co	1 95	
Dept. of Railways and Canals (Stores Account)	358 08	
Detroit & Mackinac Ry	0 49	
Denver & Rio Grande Ry	0 51	
Alfred Dickie Lumber Co	86 45	
Detroit & Toledo South Shore Ry	0 61	
Dept. of Naval Service	116 67	
Durham Transportation Co	1 71	
Elgin & Havelock Ry	170 54	
Erie Ry	169 97	
Eastern Steamship Co	2 40	
Elgin, Joliet and Eastern Ry	13 32	
Erie & Michigan Ry. & Navigation Ry	2 80	
Captain J. A. Farquhar	9 60	
Furness, Withy & Co	43 15	
Fraserville Foundry Co	164 00	
James Fleming	822 50	
Grand Trunk Ry	26,567 12	
Galena Signal Oil Co	525 75	
General Construction & Dredging Co	119 14	
Green Bay & Western Ry	0 43	
Great North Western Telegraph Co	78 00	
Great Northern Ry. Line	12 55	
Georgia Southern & Florida Ry	1 93	
Graham & Co	58 43	
Grand Trunk Ry.—Suspense	98 75	
Grand Rapids & Indiana Ry	18 62	
Gulf & Ship Island Ry	2 04	
Halifax & South Western Ry	112,096 21	
Hampton & St. Martins Ry	81 60	
Huntingdon & Broad Top Mountain Ry	296 87	
Hocking Valley Ry	28 86	

Cr.	$ cts.	$ cts.
Brought forward	3,092 47	3,067,052 42
By Chicago, Rock Island & Pacific Ry	98 84	
Chicago, Burlington & Quincy Ry	185 68	
Chicago North Western Ry	515 24	
Cleveland, Cincinnati, Chicago & St. Louis Ry	12 06	
Chicago, Milwaukee & St. Paul Ry	531 48	
Delaware & Hudson Ry	54 14	
Duluth, South Shore & Atlantic Ry	127 04	
Eastern Steamship Co	148 58	
El Paso & South Western Ry	25 48	
Great Northern Ry. Line	833 24	
Grand Trunk Pacific Ry	455 39	
Halifax & South Western Ry	76 75	
Illinois Central Ry	114 05	
Interprovincial Navigation Co	13 80	
Lake Shore & Michigan Southern Ry	157 72	
Michigan Central Ry	50 63	
Maine Central Ry	5,558 07	
Minneapolis, St. Paul & Sault Ste. Marie Ry	564 81	
Northern Pacific Ry	305 79	
New England Navigation Co	21 00	
New York Central & Hudson River Ry	38 51	
New York, New Haven & Hartford Ry	376 56	
Prince Edward Island Ry	1,453 89	
Pennsylvania Ry	58 71	
Père Marquette Ry	76 94	
Quebec Central Ry	181 56	
Salvation Army	7 79	
Temiscouata Ry	55 50	
Temiskaming & Northern Ontario Ry	1,443 30	
Toronto, Hamilton & Buffalo Ry	6 15	
Union Pacific Ry	211 42	
Wabash Ry	555 24	
		17,407 83
By Car Service Ledger :—		
Bay of Quinte Ry	4 20	
Kansas City Terminal Ry	1 40	
Lehigh Valley Ry	0 20	
New York Central Lines	68 70	

Halifax Station Labour	1,500 00	
J. Hillis & Sons	563 20	
Hood's Quarry Co	81 78	
W. F. Humphrey	79 52	
Hone and Rivet	924 80	
Inverness Ry. & Coal Co.	111 92	
Intercolonial Coal Mining Co	43 26	
Illinois Central Ry	168 60	
International & Great Northern Ry	5 85	
Intercolonial & Prince Edward Island Railways Employees Provident Fund	4 30	
Iowa Central Ry	4 92	
Indiana Harbor Belt Ry	0 11	
Kent Northern Co	6,151 84	
Kanawha & Michigan Ry	2 16	
Kansas City Southern Ry	14 71	
D. G. Kirk	10,683 86	
Lotbinière & Megantic Ry.	0 19	
Londonderry Iron & Mining Co.	21,752 59	
Lehigh Valley Ry.	558 70	
Louisiana & Western Ry	0 40	
Louisville & Nashville Ry	63 30	
Lake Shore & Michigan Southern Ry	112 01	
Lake Erie & Western Ry	34 28	
R. S. Lowe	96 10	
Lexington & Eastern Ry	8 99	
Lehigh & New England Ry	0 40	
Lotbinière Lumber Co.	3 25	
Louisiana Ry. and Navigation Co.	16 51	
Moncton & Buctouche Ry	636 69	
Michigan Central Ry.	107 41	
Maine Central Ry.	51 98	
Montmagny Light & Pulp Co.	756 09	
Thomas Malcolm	2,109 40	
Merchant's Despatch Transportation Co.	4 82	
Missouri Pacific Ry	152 88	
Minneapolis, St. Paul & Sault Ste. Marie Ry.	90 74	
Missouri, Kansas & Texas Ry.	46 62	
Maritime Coal, Ry. & Power Co.	5 00	
Metropolitan Steamship Co	59 38	
Mather Stock Car Co.	2 07	
Minneapolis & St. Louis Ry	35 65	
R. G. Murray	11 85	
Mobile & Ohio Ry	20 71	
H. W. Monsell & Co.	18 08	
Mississipi Central Ry	1 97	
Marine Ry Co	0 52	
Moncton Tramways, Electricity & Gas Co.	105 85	
Carried forward	310,749 48	2,541,019 82

Raleigh & Charleston Ry	1 05	
		75 55
Rents Ledger: -		
D. LeBlanc	20	
New Brunswick Pulp & Paper Co	1 00	
J. B. Sangster	0 01	
Joseph Arthur	0 50	
D. Hannah	1 02	
T. B. Cochrane	1 44	
A. E. Putnam	1 00	
E. McElmon	1 00	
Spencer Bros. & Turner	5 00	
O. S. Legere	1 00	
George Lovett	1 75	
Rhodes, Curry & Co.	2 00	
Town of Stellarton	1 00	
G. W. Young	1 00	
Shawinigan Water & Power Co	1 00	
		18 92
Carried forward		3,084,554 72

No. 9.—INTERCOLONIAL RAILWAY—*Continued.*

General Balance. Year ended March 31, 1912—*Continued.*

Dr.	$ cts.	$ cts.	Cr.	$ cts.	$ cts.
Brought forward	310,749 48	2,541,019 82	Brought forward		3,084,554 72
To Missouri & North Arkansas Ry	1 20				
H. F McDougall	8 46				
E. D. McGrath	15 20				
Nelson McDougall	75 00				
McLellan Lumber Co	40 00				
New Brunswick Coal & Railway Co	10 15				
New York Central & Hudson River Ry	799 43				
National Despatch Line	38 08				
Newfoundland Ry	313 64				
New York, New Haven and Hartford Ry	132 42				
Northern Navigation Co	2 60				
New York, Chicago and St. Louis Ry	54 01				
Nova Scotia Steel and Coal Co	1,321 11				
New Brunswick and P. E. Island Ry	4,521 45				
Northern Pacific Ry	25 93				
National Despatch Great Eastern Line	484 23				
Northern Central Ry	2 65				
Norfolk and Western Ry	46 80				
New York, Philadelphia and Norfolk Ry	0 36				
New Orleans and North Eastern Ry	13 54				
National Labour Congress	446 40				
Norfolk Southern Ry	14 42				
Norwood and Lawrence Ry	222 16				
Northern New Brunswick and Seaboard Ry	230 76				
New Brunswick Cold Storage Co	119 75				
New Brunswick Pulp and Paper Co	167 68				
Nashville, Chattanooga and St. Louis Ry	5 91				
Nova Scotia Car Works	2,069 68				
Oregon Railway and Navigation Co	11 53				
Ocean charges on freight at Halifax	1,233 89				
Opelousas Gulf and North Eastern Ry	1 80				
Oregon Short Line Ry	6 25				
Post Office Department	54,930 86				
Prince Edward Island Ry	734 89				
Picton Station Labour	200 00				
Pullman Co	2 23				
Pennsylvania Ry	221 60				
Price Bros	1,336 02				
Pittsburgh, Cincinnati, Chicago and St. Louis Ry	27 51				

Pennsylvania Co	98 38	
Père Marquette Ry	302 52	
Pittsburgh & Lake Erie Ry	22 72	
Philadelphia & Reading Ry	105 04	
Philadelphia, Baltimore & Washington Ry	2 87	
Pickford & Black	164 09	
C. Pickford	176 00	
Pittsburgh, Shamut & Northern Ry	25 35	
Pacific Fruit Express	2 93	
Preston Car & Coach Co	20 00	
Powers & Brewer	114 59	
Quebec Central Ry	1,255 86	
Quebec, Montreal & Southern Ry	52 62	
Quebec & Lake St. John Ry	91 64	
Quebec Contracting Co	2,353 18	
Rhodes, Curry & Co	2,266 22	
Rutland Ry	6 72	
Charles D. Ruddock	110 00	
Ryan & McDonnell	3,736 29	
Rockingham Station	3 00	
Robb Engineering Co	57 60	
Railway Automatic Car Co	61 40	
Swift Refrigerator Line	90 49	
Sherbrooke Tank Line	3 12	
Sackville Station	65 97	
Salisbury & Harvey Ry	70,711 46	
Southern Pacific Ry	14 21	
Southern Ry	84 99	
St. Lawrence and Adirondack Ry	6 34	
Seaboard Air Line	7 05	
Southern Indiana Ry	20 50	
St. Louis and St. Francisco Ry	37 15	
St. Louis, Iron Mountain & Southern Ry	18 25	
St. Louis South Western Ry	29 00	
St. Joseph & Grand Island Ry	1 00	
St. Louis Refrigerator Co	2 28	
St. Monique Station	10 00	
Santa Fe Refrigerator Despatch	17 90	
Sussex Station	25 00	
Shaw and Mason	16 51	
St. John Iron Works	71 02	
St. John Station Labor	1,500 00	
Smith Tyrer Co	9 26	
St. Lawrence Bridge Co	37 07	
Shipper's Refrigerator Car Co	2 68	
Temiscouata Ry	88 70	
Texas and Pacific Ry	10 41	
Carried forward	467,548 46	2,541,019 82

Carried forward	3,084,554 72

No. 9.—INTERCOLONIAL RAILWAY—*Continued.*

General Balance. Year ended March 31, 1912.

Dr.	$ cts.	$ cts.	Cr.	$ cts.	$ cts.
Brought forward	467,548 46	2,541,019 82	Brought forward		3,084,554 72
To Toronto, Hamilton and Buffalo Ry	5 61				
Trois Pistoles Pulp and Paper Co	73 82				
Transcontinental Railway Commissioners	1,625 56				
Toledo, St. Louis and Western Ry	24 88				
Toledo and Ohio Central Ry	10 50				
Toledo, Peoria and Western Ry	3 92				
D. Tremblay	123 29				
S. M. Tweedie	49 90				
Toronto Construction Co	429 75				
Temiskaming and Northern Ontario Ry	0 50				
Trinity and Brazos Valley Ry	1 30				
Toledo and Western Ry	10 60				
Vandalia Line	8 79				
Union Pacific Ry	30 87				
Union Ry	2 84				
Union Tank Line	2 00				
Virginia and South Western Ry	1 62				
Wabash Ry	398 62				
Western Union Telegraph Co	127 80				
A. N. Whitman and Son	150 00				
E. A. Wallberg	2 97				
Western Maryland Ry	2 41				
Wisconsin Central Ry	8 00				
Wheeling and Lake Erie Ry	5 01				
Wyoming and North Western Ry	0 97				
T. A. S. DeWolf & Son	152 35				
Robert Wilson	9 40				
York and Carleton Ry	88 95				
		470,900 69			
To Individuals and Companies Ledger Suspense :					
General Storekeeper	6 37				
Dominion Atlantic Ry	51 59				
Halifax and South Western Ry	83 99				
International Ry of New Brunswick	35 58				
Transcontinental Ry. Commissioners	50 00				
Nova Scotia Steel & Coal Co	100 62				
Intercolonial and Prince Edward Island Rys. Employees Provident Fund	0 32				
		328 47			

To Traffic Ledger :—		
H. & A. Allan	1,999 76	
Allan Bros & Co	12 00	
Canadian Northern Ry.	7,193 50	
Canadian Pacific Ry	5,903 86	
Cumberland Ry. & Coal Co.	2 25	
Dominion Steamship Line	177 47	
Department of Marine and Fisheries	1,498 28	
Department of Commerce and Labour, U.S.A.	18 45	
T. A. S. DeWolfe & Son	51 50	
Grand Trunk Ry.	31,246 35	
A. G. Jones & Co	9 50	
Newfoundland Ry	11,229 42	
Rutland Ry	0 55	
Russian-American Steamship Line	4,196 95	
Southern Pacific Ry	63 86	
Salisbury & Harvey Ry	176 34	
Uranium Steamship Co.	2,038 10	
Western Passenger Association	2 57	
		65,820 71
To Car Service Ledger :—		
Acadia Coal Co	227 00	
Albany & Hudson Ry	4 25	
Atlanta & St. Andrews Ry.	2 10	
Buffalo & Susquehanna Ry.	5 25	
Bristol Ry	12 95	
Chicago, Peoria & St. Louis Ry.	0 50	
Chicago, Cincinnati & St. Louis Ry.	137 25	
Genesse & Wyoming Ry	37 45	
Greenville & Knoxville Ry	0 35	
Jamestown, Chautauqua & Lake Erie Ry.	46 15	
Minneapolis, St. Paul & Sault Ste. Marie Ry	100 00	
New Jersey & New York Ry.	0 60	
Rutland Ry	179 95	
Register & Glenville Ry	1 75	
Temiskaming & Northern Ontario Ry.	49 95	
Trinity & Brazos Valley Ry	52 15	
Texas State Ry	1 40	
Wheeling Terminal Ry.	1 00	
White River Ry.	23 45	
		883 50
To Rents Ledger :		
Newfoundland Ry.	816 63	
Chas. Elder	0 03	
Post Office Dept.	6 25	
Oliver McGinnis	0 17	
George Maloney	0 89	
H. D. McLean	5 00	
Carried forward	828 97	3,078,953 19

Carried forward	3,084,554 72

No. 9.—INTERCOLONIAL RAILWAY—*Continued.*

General Balance. Year ended March 31, 1912—*Continued.*

Dr.	$ cts.	$ cts.	Cr.	$ cts.	$ cts.
Brought forward	828 97	3,078,953 19	Brought forward		3,084,554 72
To N. W. Pushie	5 00				
Miramichi Lumber Co	20 00				
James Comeau	20 80				
Imperial Oil Co	6 00				
Florence E. Mason	5 00				
George A. Mason	5 00				
Arthur S. Comeau	5 00				
City of Sydney	1 00				
New Brunswick Telephone Co	1 00				
Canada Railway News Co	0 06				
J. M. O'Brien	25 00				
E. D. McGrath	8 35				
William Barrie	7 00				
Canadian Pacific Ry	529 13				
Emile Paturel	2 00				
Steamer *Granville*	59 00				
Edward O'Grady	18 00				
John Stokes	27 00				
Fred. Tobin	30 00				
T. Walsh	30 00				
Mrs. Ryan	30 00				
Department of Public Works	1 00				
David M. Lawson	1 00				
Dominion Express Co	6 25				
Canadian Express Co	12 50				
Furness, Withy & Co	25 00				
C. Vellieux	28 00				
N. Lamontagne	7 50				
Dame C. W. Carrier	228 00				
Olivier Gingras	57 00				
Misses Camire	12 00				
Maurice Camiré	11 00				
Mrs J. Atkinson	95 00				
Mrs. L. Roberge	96 00				
James Cloutier	38 00				
George Cloutier	38 00				
Frank Cloutier	4 50				
H. Begin	182 00				
Jean Lamothe	45 00				
Louis Boisvert	4 00				
Emélie St-Laurent	197 00				

Peter Bernier	6 00	
David Rouleau	20 00	
Arthur Lamontagne	4 00	
Joseph H. Higgins	5 00	
E. J. Smith	1 00	
J. A. R. Weir	9 00	
G. W. White	3 75	
Thomas Sharpe	1 00	
Henry O'Leary	2 00	
Mrs. D. McLean	2 10	
Angus McLellan	10 00	
E. S. Vye	0 50	
James Sproull	2 00	
Robert O'Leary	2 00	
Mrs. Desmond	2 00	
E. J. Smith	2 00	
W. J. Williams	2 00	
Malcolm Patterson	2 00	
Mrs. Stubbs	1 00	
J. M. McDonald	1 00	
John R. Stewart	0 75	
William Young	7 00	
Charles Richards	2 00	
W. J. Kent	1 00	
D. S. Harper	2 00	
Adam Mahar	0 25	
Geo. Mann	0 25	
Benj. Smith	0 25	
Municipality of Amqui	1 00	
D. McEvoy	5 00	
James E. Kelly	2 00	
S. H. White & Co.	10 00	
N. Pushie	5 00	
M. McLean	15 00	
J. A. Kirkpatrick	3 00	
John C. Gass	30 00	
A. & R. Loggie	1 00	
M. A. McLeod	5 00	
I. Matheson & Co	1 00	
George Stone	5 00	
John Legere	5 00	
William Currie	8 50	
H. T. McDougall	3 00	
Strathcona Coal Co	3 00	
Town of Shediac	3 00	
McKenzie & Graham	5 00	
Joseph Raymond	1 00	
David Richards	2 00	
Carried forward	2,948 31	3,078,953 19

Carried forward		3,084,554 72

No. 9.—INTERCOLONIAL RAILWAY—*Continued.*

General Balance. Year ended March 31, 1912—*Continued.*

Dr.	$ cts	$ cts.	Cr.	$ cts.	$ cts.
Brought forward	2,948 31	3,078,953 19	Brought forward		3,084,554 72
To W. H. Miller	25 00				
M. A. McLeod	5 00				
City of Sydney	4 00				
Central Telephone Co	38 00				
D. M. Grant	2 00				
W. F. Napier	2 00				
Tudhope Carriage Co	5 00				
Harris Abattoir Co	15 00				
City of Sydney	3 00				
I. B. Shaffner	5 00				
Charles Love	2 00				
James Barclay	3 00				
Saunderson Manufacturing Co	5 00				
Town of Rimouski	12 00				
Canadian Pacific Railway	1 00				
J. W. Laurie	5 00				
A. D. Munro	1 00				
Henry McIntyre	1 00				
Toneman Wheaton	15 00				
George L. McLean	1 00				
John W. Logan	5 00				
Henry Lunam	2 00				
Robert Douglas	3 00				
Antigonish & Sherbrooke Telephone Co	4 00				
Cooper & Cunningham	15 00				
S. W. Dimock	2 00				
Robert Crawford	2 00				
B. N. S. Underhill	2 00				
H. Mc. Hart	60 00				
Thomas Bélanger	1 00				
W. R. Steeves	0 79				
Samuel Melanson	5 00				
W. J. Kent	5 00				
Doucett Bros	5 00				
City of Sydney	2 00				
New Brunswick Telephone Co	4 00				
Shediac Electric Light & Power Co	2 00				
Alphonse Dallaire	1 00				
Charles A. Vanwic	2 00				
New Brunswick Telephone Co	2 00				
Benjamin Titus	2 00				

W. A. Wilson	2 00		
Harry Harrison	2 00		
Dominion Express Co	10 00		
Canadian Express Co	0 48		
Geo. Anderson	5 00		
Canadian Express Co	22 89		
		3,276 47	
To Advances:—			
H. M. Stevens	5 06		
Sir G. Falconbridge	1,000 00		
A. E. G. McKenzie	200 00		
A. R. Smith	20 00		
Hon. J. Bureau	150 00		
T. P. Owens	500 00		
R. A. Lawlor	250 00		
L. G. Demers	200 00		
		2,325 06	
		3,084,554 72	3,084,554 72

E. and O. E.
MONCTON, N. B.

S. L. SHANNON,
Comptroller and Treasurer.

INTERCOLONIAL RAILWAY OF CANADA.

STATEMENT of Averages, Year ending March 31, 1912.

Mileage of railway	146,815
Engine mileage	9,415,487
Total train mileage	7,400,975
" car mileage	104,002,011
Ratio of earnings to gross earnings—	Per cent.
Revenue from transportation	98·36
Revenue from operations other than transportation	1·64
Gross earnings per mile of railway	Dollars 7,215·74
" " engine mile	" 1·13
" " train mile	" 1·43
" " car mile	Cents. 10·19
Ratio of expenses to gross earnings—	Per cent.
Maintenance of way and structures	17·11
" equipment	25·31
Traffic expenses	2·06
Transportation expenses	53·15
General expenses	2·35
Expenses per train mile—	Cents.
Maintenance of way and structures	24·49
" equipment	56·23
Traffic expenses	2·94
Transportation expenses	76·07
General expenses	3·36
Expenses per mile of railway—	Dollars.
Maintenance of way and structures	1,234·49
" equipment	1,826·48
Traffic expenses	148·45
Transportation expenses	3,834·85
General expenses	169·59
Locomotive and car repairs per locomotive and car—	Dollars.
Locomotives	1,799·20
Passenger cars	642·63
Freight cars	51·22

C. F. BURNS,
Auditor of Disbursements.

S. L. SHANNON,
Comptroller and Treasurer.

SESSIONAL PAPER No. 20

INTERCOLONIAL RAILWAY.

Statement of Receipts.

Months.	Passenger Traffic.	Freight Traffic.	Mails and Sundries.	Total.
	$ cts.	$ cts.	$ cts.	$ cts.
1911—				
April	240,360 50	638,727 63	39,628 96	918,717 09
May	231,795 97	565,264 57	36,182 61	833,243 15
June	271,341 71	549,444 60	41,831 33	862,617 64
July	334,553 42	536,731 69	43,478 66	914,763 77
August	379,150 62	566,080 55	45,207 24	990,438 41
September	334,189 12	548,260 78	43,765 35	926,215 25
October	247,919 06	651,818 58	51,489 71	951,227 35
November	200,008 95	654,923 02	56,962 77	911,894 74
December	220,665 49	628,417 75	51,088 39	900,171 63
1912—				
January	187,177 51	506,123 06	50,279 98	743,580 55
February	165,504 58	544,658 40	45,650 27	755,813 25
March	204,637 70	617,849 86	62,615 45	885,103 01
1911-12	3,017,304 63	7,008,300 49	568,180 72	10,593,785 84
1910-11	2,899,419 82	6,344,595 66	619,767 92	9,863,783 40

W. H. Estano,
Auditor of Traffic.

S. L. SHANNON,
Comptroller and Treasurer.

INTERCOLONIAL RAILWAY.

Passenger Statement.

Months.	Local.		Through.		Total.	
	Number.	Mileage.	Number.	Mileage.	Number.	Mileage.
1911—						
April	251,118	7,922,690	24,896	7,457,398	276,014	15,380,088
May	247,240	8,145,104	25,207	5,646,613	272,447	13,791,717
June	279,580	10,364,050	22,429	4,367,469	302,009	14,731,519
July	323,623	13,237,013	31,550	5,480,778	355,173	18,717,791
August	354,384	13,575,575	37,622	7,008,978	392,006	20,584,553
September	323,223	11,948,343	34,411	5,506,315	357,634	17,454,658
October	240,756	8,220,128	23,386	3,921,761	264,142	12,141,889
November	209,706	6,505,497	17,609	3,192,060	227,315	9,697,557
December	258,061	8,761,518	20,383	3,843,538	278,444	12,605,056
1912—						
January	223,666	6,359,183	20,110	4,808,806	243,776	11,167,989
February	190,984	5,740,867	12,911	3,158,175	203,895	8,899,042
March	224,581	6,641,759	19,117	6,296,402	243,698	12,938,161
1911-12	3,126,922	107,421,727	289,631	60,688,293	3,416,553	168,110,020
1910-11	2,968,435	104,232,338	264,460	58,148,884	3,232,895	162,381,222

W. H. Estano,
Auditor of Traffic.

S. L. SHANNON,
Comptroller and Treasurer.

INTERCOLONIAL RAILWAY.

Freight Statement.

Months.	Local.		Through.		Total.	
	Tons.	Mileage.	Tons.	Mileage.	Tons.	Mileage.
1911—						
April	295,271	67,144,604	111,243	51,370,955	406,514	118,515,569
May	283,642	46,193,339	91,772	42,399,878	375,414	88,593,217
June	278,858	42,723,582	85,878	38,944,739	364,736	81,668,321
July	276,164	43,025,249	81,873	36,309,821	358,037	79,335,070
August	291,826	47,568,554	83,182	36,903,081	375,008	84,471,635
September	269,631	44,943,188	78,842	39,159,319	348,473	84,102,507
October	299,206	54,638,863	85,339	45,010,729	384,545	99,649,592
November	317,962	61,881,849	93,467	61,396,112	411,429	113,277,961
December	251,058	49,585,988	128,558	73,513,323	379,616	123,099,311
1912—						
January	274,376	66,201,437	79,992	38,685,824	354,368	104,887,261
February	287,222	70,989,411	78,959	37,646,319	366,181	108,635,730
March	327,273	76,658,551	85,005	44,896,005	412,278	121,554,556
1911-12	3,452,489	671,554,615	1,084,110	536,236,115	4,536,599	1,207,790,730
1910-11	3,085,437	592,203,856	1,015,963	508,430,673	4,101,400	1,100,634,529

S. L. SHANNON,
Comptroller and Treasurer.

W. H. Estano,
Auditor of Traffic.

SESSIONAL PAPER No. 20

INTERCOLONIAL RAILWAY.

COMPARATIVE STATEMENT of principal revenue producing freight carried over the Intercolonial Railway in 1910-11 and 1911-12.

Description.	Year ended March 31, 1911.	Year ended March 31, 1912.
	Tons.	Tons.
Product of agriculture :		
Grain	111,667	130,161
Flour	169,628	187,364
Potatoes	20,332	45,396
Hay	58,354	96,627
Apples, fruit and vegetables	13,487	26,557
Other mill products	46,749	53,389
Cotton	5,794	4,021
Products of animals :		
Hogs and horses	8,174	9,527
Sheep and cattle	11,034	11,649
Lambs	1,753	1,347
Dressed meats	15,028	13,526
Poultry and game	954	805
Fish	36,737	31,581
Oysters	2,433	3,109
Wool	1,590	2,841
Hides and leather	6,860	6,939
Products of mines :		
Coal and coke	1,039,722	1,233,532
Ore	22,382	19,800
Sand, stone, etc	175,080	201,935
Salt	12,661	12,722
Slate and granite	1,461	1,455
Phosphate	10,292	10,290
Products of forest :		
Lumber	529,950	539,537
Bark	13,874	19,800
Cordwood	58,625	54,196
Pulpwood	183,534	160,659
Wood pulp	42,086	26,992
Shingles	70,696	76,420
Other forest products	113,639	133,812
Manufactures :		
Petroleum and oils	35,363	34,916
Sugar	52,192	57,927
Iron and steel rails	108,549	101,782
Iron, pig and bloom	64,867	71,330
Wire rods	90,475	75,494
Steel billets	135,096	108,668
Other castings and machinery	111,615	63,224
Bar and sheet metals	46,031	101,669
Brick, lime and cement	103,027	135,953
Agricultural implements	12,273	12,650
Furniture	9,638	10,216
Immigrants effects	4,175	5,685
Miscellaneous	543,523	641,996
Grand total	4,101,400	4,536,599

S. L. SHANNON,
Comptroller and Treasurer,

W. H. ESTANO,
Auditor of Traffic.

INTERCOLONIAL RAILWAY.

DESCRIPTIVE STATEMENT of Freight Transported during the Year ended March 31, 1912.

—	Number.	Tons.
Barrels flour	1,873,640	187,364
Bushels grain	5,206,440	130,161
Live stock	115,189	22,523
Sup. feet lumber	656,418,588	910,428
Coal and other fuel	.....	1,287,728
Manufactured goods	.....	1,280,928
All other articles	.....	717,467
Total	....	4,536,599

S. L. SHANNON,
Comptroller and Treasurer.

W. H. ESTANO,
Auditor of Traffic.

INTERCOLONIAL RAILWAY.

STATEMENT of Coal shipped over the I. C. R. during the fiscal year ended March 31, 1912.

From.	For the West.			For Local Stations.	Total.
	Via St. John.	Via St. Rosalie.	Via Montreal.		
	Tons.	Tons.	Tons.	Tons.	Tons.
Stellarton	.....	73	....	496,241	496,314
Westville	.....	.....	.....	33,810	33,810
New Glasgow	....	.....	.....	63,299	63,299
North Sydney	303	.....	.....	37,330	37,633
Sydney	.....	.....	.....	24,192	24,192
Point Tupper	.....	.....	.....	115,134	115,134
Springhill	.....	.....	.....	102.171	102,171
Maccan	....	....	.....	192,776	192,776
Norton	....	.....	.....	41,315	41,315
Coal Branch	.....	.....	.....	111	111
Harcourt	....	.....	.....	4,778	4,778
	303	73	....	1,111,157	1,111,533

S. L. SHANNON,
Comptroller and Treasurer.

W. H. ESTANO,
Auditor of Traffic.

SESSIONAL PAPER No. 20

INTERCOLONIAL RAILWAY.

STATEMENT showing quantity of the undermentioned articles carried over the Intercolonial Railway during fiscal year ended March 31, 1912.

Articles.	Via Montreal.	Via St. Rosalie.	Via St. John.	For Local Stations.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.
Raw Sugar, West Bound	2,558	1,096	.....	12,057	15,711
Refined Sugar, West Bound	9,691	8,242	1,519	21,870	‡41,322
European Freight, West Bound via Halifax	12,347	4,860	17	43,682	60,906
‡ European Freight, West Bound via St. John	8,694	622	.....	8,956	18,272
European Freight, East Bound via Halifax	22,628	4,177	8,760	*131,150	166,715
‡ European Freight, East Bound via St. John	19,875	252	.....	–29,791	49,918
	Bush.				Bush.
Grain for Shipment via Halifax	122,734	.....	.....	.....	122,734
‡ Grain for Shipment via St. John	1,215,574	.....	.....	.....	1,215,574
	Tons.				Tons.
Fresh Fish	4,213	1,476	1,917	6,686	14,292
Salt Fish	4,060	4,250	425	10,108	18,843
Coal	.....	73	303	1,111,157	1,111,533

S. L. SHANNON,
Comptroller and Treasurer.

W. H. ESTANO,
Auditor of Traffic.

* Includes 113,426 Tons Deals via Halifax.
– Includes 8,022 Tons Deals via St. John.
‡ Previous Annual statements did not include West Bound European Freight and East Bound European Freight and Grain shipments via St. John, N.B.

STATEMENT Ocean Borne Passenger Business done at the Port of Halifax during the year ending March 31, 1912.

Name of Steamer.	Number of Passengers.			
	1st.	2nd.	Steerage.	Total.
Allan Line—				
Scotian		354	1,217	1,571
Mongolian	78	257	1,123	1,458
Hesperian	150	896	3,165	4,211
Virginian	133	674	1,394	2,201
Tunisian	167	1,092	2,729	3,988
Numidian		345	598	943
Victorian	156	1,120	2,193	3,469
Carthaginian	68	166	927	1,161
Sicilian		263	918	1,181
Corinthian	21	219	717	957
Parisian		313	457	770
Pretorian	83	276	613	972
Grampian	50	555	1,221	1,826
Corsician	117	686	1,646	2,449
Lake Erie		48	78	126
Ionian	32	278	377	687
C. P. R. S. S—				
Empress of Britain	214	7	12	233
Empress of Ireland	93	26	16	135
Pickford & Black—				
Sokoto	33			33
Ocamo	9			9
Uranium S. S.—				
Uranium	4	37	2,715	2,756
Volturno	3	66	2,809	2,878
Campanello	8	61	1,845	1,914
Royal Line—				
Royal Edward	150	578	1,558	2,286
Royal George	67	383	1,565	2,015
Dominion Line—				
Southwark		125	539	664
Canada		472	806	1,278
Megantic	26	432	662	1,120
Teutontic		232	565	797
Dominion		168	395	563
	1,662	10,129	32,860	44,651

SESSIONAL PAPER No. 20

STATEMENT of Ocean Borne Passenger Business done at the Port of St. John, N. B., during the year ending March 31, 1912.

Name of Steamer.	Number of Passengers			
	1st.	2nd.	Immigt.	Total.
Donaldson Line—				
Saturnia	23	17	273	313
Athenia	17	24	118	159
Cassandra	17	.....	156	173
Canada Line—				
Barcelona	.....	.....	8	8
Samland	.....	.....	6	6
Williehead	.....	.....	6	6
C. P. R. Line—				
Montreal	.....	.....	83	83
Lake Champlain	.....	.....	8	8
Empress of Britain	7	6	16	29
Montezuma	.....	.....	73	73
Lake Manitoba	.....	2	9	11
Lake Michigan	.....	.....	11	11
Empress of Ireland	5	.....	12	17
Montfort	.....	.....	29	29
Mount Temple	.....	.....	29	29
Allan Line—				
Corsican	1	3	5	9
Virginian	5	1	.....	6
Lake Erie	.....	.....	28	28
Tunisian	2	2	2	6
Victorian	4	.....	4	8
Grampian	.....	.....	2	2
Pomeranian	1	.....	3	4
Hesperian	8	.....	.....	8
Sardinian	.....	.....	2	2
Total	90	55	883	1,028

STATEMENT of Ocean Borne Passenger Business done at the Port of Quebec during the year ending March 31, 1912.

Name of Steamer.	Number of Passengers.		
	1st.	2nd.	Total.
C. P. R. S.S. Line—			
Montford		13	13
Empress of Britain	14	9	23
Mount Royal		7½	7½
Montezuma		12½	12½
Lake Manitoba	10	21½	31½
Montreal		10	10
Empress of Ireland	7½	20	27½
Mount Temple	2	33½	35½
Lake Michigan		11	11
Lake Champlain	1	14	15
Montrose		8	8
Allan Line—			
Grampian	4	17½	21½
Pomeranian		13	13
Lake Erie	2	9	11
Hesperian	8	28	36
Ionian	2	13	15
Corsican	11	49½	60½
Scotian	11½	35½	47
Pretorian		8	8
Victorian	21	42	63
Sicilian		2	2
Tunisian	11	32	43
Corinthian	10½	26½	37
Sardinian		17	17
Virginian	11½	45	56½
Donaldson Line—			
Saturnia	6	23½	29½
Athenia	5	32	37
Cassandra	2	17	19
Cunard Line—			
Ascania	2	18	20
Dominion Line—			
Dominion		4	4
Teutonic	4	41	45
Megantic	13	30	43
Laurentic	14	4	18
Canada	16½	9	25½
Royal Line—			
Royal George	18	41	59
Royal Edward	26½	27	53½
Canada Line—			
Pisa		40½	40½
Willehad		32	32
Samland		2	2
Gothland		12	12
Barcelonia		25	25
Southwark		27	27
Albania		12	12
Wittekind		16	16
Total	234	911	1,145

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STATEMENT of Ocean Borne Freight Traffic via Halifax for the year ending March 31, 1912.

Line of Steamers.	Import.	Export.
	Tons.	Tons.
Allan	15,782	4,562¾
Manchester	2,286¼	7,321½
Elder Dempster	1,528¾	1,623¾
Red Cross	189½	4,850¼
Pickford & Black	18,093	35,283½
Furness	19,898¼	54,585¼
Uranium	2,720¾	94
Empress, C.P.R	905½	707
Dominion	803½	
Canadian Northern	2	
White Star	153	
Royal	4,498¼	6,031¾
Plant	2,160	175¾
Donaldson		392
I. S. DeWolf & Son		62½
Tramp	8,849¼	52,250
Totals	77,870	167,940

STATEMENT of Ocean Borne Freight Traffic via St. John for the year ending March 31, 1912.

Line of Steamers.	Import.	Export.
	Tons.	Tons.
Donaldson	12,653	3,314
Allan	4,581	5,679
Manchester	3,348	2,713
C. P. R	2,935	5,294
Canada	275	
Elder Dempster	1,806	9,296
Furness	396	535
Pickford & Black	1,721	1,127
Head Line		2,880
Totals	27,715	30,838

INTERCOLONIAL

STATEMENT of casualties for

Date.	Time of day.	No. of train.	Description of train.	Name of Conductor.	Name of Driver.	No. of Engine.	Place of Accident.
1911.							
April 8	18·10	.....	.....	.....	.....	....	Public crossing, West of Laurier.
" 13	13·30	.....	Special.....	C. Rioux.....	E. Côté.....	72	Tobin Branch.....
" 16	3·40	.....	"	O. Langlois.....	E. Parent.....	319	St. François.....
" 24	23·30	.....	Shunter	.....	T. Stockall.....	215	Richmond yard....
May 1	.....	.....	"	.....	N. Burris.....	124	Truro yard .....
" 6	9·30	.....	Working train.	E. Gagnon.....	W. Fraser.....	269	Little Metis.....
" 6	12·15	.....	Special.....	H. G. Thompson..	W. Megarity.....	223	Apohaqui.....
" 6	14·50	.....	Freight.....	O. Langlais.....	J. Gagnon.....	246	One mile West of St. Louis.
" 10	13·12	150	Passenger...	J. Huppe	J. Couillard	321	Rimouski.....
" 12	16·10	146	" ..	M. Verville.....	Jas. Houston.....	166	Point St. Charles ..
" 13	14·30	.....	Working train.	O. Levesque ...	Chas. Deslisle....	389	One mile West of St. Romuald.
" 13	19·50	.....	Shunter	.....	R. Phinney	258	Truro yard .....
" 13	16·46	146	Passenger...	U. St. Pierre.....	N. Houston.....	166	Beloiel Station.....
June 6	22·15	75	Fast freight.	J. A. Davidson....	Jas. Stratton. ...	284	One mile East Jacquet River.
" 10	6·40	.....	Working train.	A. Jarest.....	B. Côté.....	35	Carmel Pit.. .....
" 14	10·30	.....	Coal train ..	A. Gauvreau.....	E. Mitchell.....	379	Princess Pier .....
" 16	23·05	76	Fast freight.	C. Couchy.....	L. Dutil.....	22	St. Hubert .....
" 17	18·40	.....	Shunter	Fred Côté.....	Oct. Halle.....	312	Levis wharf.....
" 20	6·50	133	Passenger...	J. B. Crockett....	G. B. Storey.....	99	Main Street crossing, Moncton.
" 24	15·45	.....	Special.....	C. Audet.	H. Maisey.....	396	Near Cedar Hall...
July 4	18·15	20	Passenger...	N. Hopper.....	B. Cooke.	319	Hilden ....
" 6	6·15	17	" ..	Jas. McDonald ...	Jas. McRury.....	76	Townsend Street crossing, Sydney.
" 8	10·30	20	" ..	J. Craigie	A. Prowse	73	Half mile East McIntyre's Lake.
" 11	11·02	47	Mixed.....	G. Soucy.....	E. Parsons.	407	St. J. P. Joli .....
" 14	18·35	94	Pass. (DAR)	A. Simmonds.....	T. Stockall.....	32	Ferry crossing, Richmond.
" 14	11·00	34	Passenger...	J. Berry.....	R. Lightbody.....	336	Folleigh.....
" 17	.....	19	" .	A. J. Vance.....	J. Clarke.....	318	Fairview .....
" 25	22·25	17	" ..	J. McDonald.. ...	T. Scott.....	315	New Glassgow.....
" 25	9·35	.....	" ..	B. Ripley.....	W. Smith.... ..	50	Near Windsor Jct..
" 27	14·30	.....	Shunter	E. S. Vye	H. Cameron	183	Newcastle wharf...

SESSIONAL PAPER No. 20

RAILWAY.

the year ended March 31, 1912.

Name of person injured.	Whether passenger or employee.	Particulars of Accident.	Extent of injury.	Verdict.
Alphonse Moffet and two sisters.	Neither.	Runner of sleigh caught in rail at the crossing.	Badly injured.	
Alphonse Malenfant,	"	Box car in which they were stealing a ride left track.	Slightly injured.	
Nap. Malenfant. . .	"		Badly injured.	
Chas. E. LaBlonde. . .	"		"	
Adélard Tardif.	Brakeman.	Got foot caught in guard rail and run over by train.	Fatal	Railway at fault.
A. Moore.	"	Fell from a moving car.	"	Inquest not
L. Bruce.	Foreman shunter. . .	Fell off foot board of engine. .	Slightly injured.	necessary.
Absolom Lavoie . . .	Labourer.	Struck by a piece of falling scantling.	Fatal	Accidental.
Isaac Gaunce.	Neither.	Got foot caught between draw-bars.	Foot injured.	
Michel Houton. . . .	"	Attempted to get on a moving car.	Foot cut off.	
Auguste Duchène. . .	"	Struck by train.	Fatal	Accidental.
Adrien Soulière. . . .	"	"	Slightly injured.	
J. D. Therrien.	Track foreman.	Fell between moving cars. . . .	Shoulder fractured.	
Amos Biswanger. . .	Brakeman.	Attempted to get on engine and missed footing.	Fatal	No inquest.
Wm. Couture. . . .	Neither.	Struck by train while walking on track.	"	Accidental.
J. A. Davidson. . .	Conductor.	Fell from cupola of van.	Badly shaken up.	
O. Savary.	Brakeman.	Fell from cars.	Both legs cut off.	
Jas. Hetherington . .	Neither.	Fell from a moving car.	Collar bone broken.	
J. Brouillette. . . .	"	Struck by train.	Fatal	Railway and employees not responsible.
Jos. Dostie.	"	Struck by train while walking on track.	Badly injured.	
Jos. Cuthbertson,	Passenger	Steps on which they were	Seriously injured.	
Arthur Legère.	"	standing being torn off.	Badly injured.	
Albert Paradis. . . .	Neither.	Run over by train.	Fatal.	Accidental.
Mrs. Tucker.	Passenger	Fell while getting off moving cars.	Badly injured.	
Harry MacCurrie. . .	Neither.	Struck by train while walking on track.	"	
Fixott.	Passenger	Fell out of window of car. . . .	Bruised about face.	
Geo. Bélanger	"	Attempted to get on moving cars.	Fatal	Accidental.
Herbert Palmer. . .	Neither.	Struck by train.	Slightly injured.	
Geo. Banfield.	Passenger	Jumped from moving train. . .	"	
Herbert Marshall. . .	"	" " . . .	"	
Alex. Barclay.	"	Fell from train while under influence of liquor.	"	
Clara Byers.	"	Fell against and broke glass of car door.	Wrist badly cut.	
J. Dempsey.	Brakeman	Right foor caught between draw-bars.	Badly crushed.	

INTERCOLONIAL RAILWAY—

STATEMENT of Casualties for

Date.	Time of Day.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.	Place of Accident.
1911.							
Aug. 3	12·35	303	Passenger...	A. Crookshank ...	P. J. Ivory.....	204	Upper Blackville ..
" 4	14·55	4	" ...	W. H. Williams ..	T. Townsend	335	Pt. du Chene Whart
" 10	.....	.....	Shunter	.....	.....	....	Sydney yard.....
" 10	15·30	.....	Special.....	D. J. McDonald..	J. W. Gunning...	119	Scotsburn .....
" 11	19·45	.....	Shunter	H. A. Baker.....	J. Gazley	201	Truro ....
" 12	6·45	199	Passenger ..	L. E. Proulx.....	Jas. Fohy	343	Mile East of St. Madeline.....
" 19	17·30	.....	Special.....	D. Sweeney.....	O. Gilker.....	267	Gloucester Jct... .
" 23	9·20	75	Freight.....	J. C. Gillespie....	H. McDonald.....	252	Frosty Hollow.....
Sept. 6	18·37	.....	Passenger ..	F. Cote.....	O. Halle.....	379	Pt. Levis yard.....
" 6	....	.....	.....	.....	.....	....	One mile west of Riv. du Loup....
" 13	22·45	.....	Shunter ..	.....	T. McCallum.....	201	Truro yard .....
" 20	16·25	20	Passenger ..	G. C. Keys.....	H. Thompson.....	415	West River.... ...
" 21	18·10	84	" ..	John Coffey	R. Bulmer... . ..	. ..	Moncton Station...
" 21	21·00	.....	.....	.....	.....	....	Montmagny Bridge.
" 22	20·45	15	Freight.....	W P. Smith.....	R. Simpson.	222	Greenville .....
" 23	9·30	.....	Shunter	.....	S. Watson.....	266	Moncton yard .....
" 27	.....	.....	"	.....	J. Kelly.....	201	Truro yard .....
Oct. 3	16·25	.....	Special.	N. Margeson.....	C. Stockall	26	Moirs' Mills (Bedford) .....
" 9	16·30	.....	Ballast train	J. Harvey	D. J. Wood	213	New Mills.....
" 11	15·01	.....	Passenger ..	Geo. Wathem.....	G. Cote	407	St. Pierre.....
" 13	16·00	.....	Shunter	.....	Jno. Cameron.....	10	North Sydney.....
" 14	13·10	.....	Special.....	E. K. O'Brien	W. H. McKinnon.	263	Riversdale ... .
" 21	24·30	15	Freight.....	H. B. Gordon.....	L. Bradshaw	222	Sackville .....
" 26	7·20	304	Passenger ..	R. Henry.....	J. Cameron. ...	205	Chatham Jct .... .
" 27	22·02	199	" ..	A. Aubin.....	Geo. Lamonthe...	348	Rimouski .....
" 28	.....	.....	Freight....	C. D. Philips....	.....	....	Rockingham.....
" 31	1·30	.....	Special.....	T. F. Melanson...	A. R. Price.....	229	Sackville .....
Nov. 4	12·30	.....	Freight special.	A. R. Gordon.....	H. Cummings ...	366	Public Crossing east of Trenton ..
" 4	19·30	.....	Shunter	.....	J. S. Mitchell.....	287	Stellarton yard ....
" 9	23·00	15	Freight.....	A. Lockhart.....	L. Bradshaw	267	Springhill Jct. yard.
" 9	19·40	102	Mixed.....	J. McLellan	G. Gallivan.....	293	Scotch Lake.....
" 13	19·40	.....	Shunter	R. Redmond.....	M. Flavin	405	North St., Halifax..
" 13	19·30	150	Passenger ..	R. W. Orchard ...	J. Cameron	322	Milnikik Siding .. .
" 17	1·50	.....	Shunter	.....	T. Matheson.... .	311	Campbellton yard..
" 16	19·20	15	Freight.....	H. B. Gordon.....	L. Bradshaw	336	Londonderry.....

SESSIONAL PAPER No. 20

Continued.

the Year ended March 31, 1912.

Name of Person Injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict.
Wm. Mills	Passenger	Steps of car on which he was standing, torn off	Head injured	
Wm. McPherson	"	Struck by engine	Foot cut off	
—— Bouche	Brakeman	While coupling cars	Hand smashed	
Wm. Leithead	"	While hanging on side of car, struck by a projection from station	Badly injured	
A. H. McKenzie	Foreman shunter	Attempted to get on moving cars	Ruptured	
Philias Lussier	Neither	Struck by train while crossing tracks	Slightly injured	
M. Arseneau	Brakeman	Slipped and fell while unloading freight	Leg injured	
—— Casey	Neither	Attempting to get on cars, fell under wheels	Foot cut off	
P. Gaudreault	"	Struck by train while walking on track	Badly injured	
Paul Rousseau	"	Found dead on track	Fatal	Accidental.
A. Purcell	Brakeman	Struck by switch target	Slightly injured	
Jos. Terris	Neither	Falling from moving train	Injured about head	
John Mash	Passenger	Fell from train	Badly injured	
Jules Asselin	Neither	Found on track dead	Fatal	No blame attached to railway.
Lionel Rushton	Passenger	Fell from train while under influence of liquor	"	Accidental.
Mrs. McIntyre	Neither	Struck by engine while crossing tracks	Slightly injured	
Susan Langille	"	Struck by engine while walking on track	"	
Walter Oaks	Sectionman	Struck by train while removing trolley from track	Fatal	Train crew exonerated from blame
M. J. Barthe	Brakeman	Fell from train	Right leg cut off	
A. Vezina	Passenger	Foot caught between cars	Badly bruised	
Matthew Hare	Neither	Fell under wheels of car while under influence of liquor	Foot crushed	
D. E. Johnson	Brakeman	Fell from train	Arm badly crushed	
Chas. McDonald	Neither	Struck by train	Foot "	
Herbert Malone	Brakeman	Got caught between cars	Fatal	No inquest.
Antoine Rioux	Passenger	Fell from train	Right arm badly injured	
C. D. Philips	Conductor	Lever of semaphore struck him in face	Face badly bruised	
Frank Melanson	Brakeman (not on duty)	Collision	Fatal	Train crew at fault.
Grant Murray	Neither	Struck by train while crossing track	"	Railway and employees exonerated.
Jos. McGillivray	"	" " "	Leg broken	
Jas. P. McKay	Yardman	On attempting to get on engine missed footing	Slightly injured	
Abel Comeau	Neither	Trying to board moving train.	Foot badly jammed	
Andrew McKinnon	"	Supposed to have been struck by train	Fatal	Accidental.
Frank Bell	Shunter	Fell off box car	Hip injured	
Geo. V. Randolph	Passenger	Fell from train	Slightly injured	
J. Bourque	Yardman	Fell under wheels of car	Right arm cut off	
Mrs. Buchanan	Neither	Trying to catch train, stepped through culvert	Leg broken	

INTERCOLONIAL RAILWAY—

STATEMENT of Casualties for

Date.	Time of Day.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.	Place of Accident.
1911							
Nov. 18	22.00	.....	Shunter	R. G. Duff	C. Cool.	370	West of Charlo ...
Dec. 3	.....	.....	.....	.....	.....	....	Amherst. .....
" 14	16.40	.....	Special. ...	A. Gauvreau.....	H. Gingras.	165	Nicolet ....
" 19	6.57	78	Passenger ..	A. Calder	J. Campbell	161	East River Bridge (New Glasgow).
" 19	16.30	.....	Shunter	.....	A. McGrath. . .	288	Richmond yard ...
" 20	20.30	26	Passenger ..	J. A. Hughes.....	Geo. Kantley.....	335	Onslow..... ...
" 21	....	17	" ..	.....	.....	....	Halifax Depot.....
" 25	.. ..	.....	.....	....	.....	....	East of George's River Bridge.
" 27	.....	34	Passenger ..	.....	.....	....	Campbellton .....
1912.							
Jan. 4	24.15	66	" ..	D. A. MacFarlane	H. Patriquin	172	Pictou. .....
" 4	12.30	.....	Special	W. J. Ellis.	T. Hennessey.....	277	Fairview .....
" 9	12.40	....	Wing plow special.	J. F. Doyle.....	G. M. Wilson.....	306	Campbellton .....
" 11	14.10	25	Passenger ..	Jas. Daley.....	T. McBeath. . . .	333	Humphreys Crossing.
" 13	19.00	.....	Special	R. Jefferson	J. E. Stronach ...	615	Springhill Junction yard.
" 13	14.45	.....	Freight.....	W. Lacombe.....	A. Rouleau.....	60	Public Crossing West of St. Romuald.
" ..	17.00	....	Shunter	.....	A. Cook..... ...	....	Moncton yard .....
" 16	18.00	....	Light eng...	.....	A. McGrath	1081	Willow Park (Halifax).
					T. Stockall.	821	
" 23	17.30	....	Plow Special	R. Begin.....	W. J. Atkinson...	87	Chaudière Curve...
" 23	11.00	....	"	H. Murray.....	H. Phinney.	1045	Truro yard .....
Feb. 3	16.10	....	Shunter ...	M. Wilson..... ...	R. C. Colpitts	23	Calhouns Mills.....
" 10	17.00	.....	"	.....	N. Henry.....		Campbellton .....
" 12	19.00	.....	"	.....	J. Daine.....	815	North Street (Halifax).
" 14	17.10	33	Passenger ..	J. A. Bouchard...	R. McNeil.....	432	East of PublicCrossing, St. Hyacinthe
" 17	9.15	.....	Shunter . ..	.....	A. Dunbar	820	Pirate Harbour....
" 19	11.40	148	Mixed	S. Dussault..	J. Bruce.....	141	Carmel.....
" 23	19.00	.....	. .....	.....	....	....	Truro ....
" 24	9.00	....	Shunter	. ...	T. Henry..... ..	812	Campbellton .....
" 28	16.40	....	"	.....	J. McDermott....	1124	Moncton yard.....
					F. Welling.....	806	" .....
" 29	16.20	.. ..	Special	W. Paradis.....	J. Bruce.....	87	Drummondville....
Mar. 6	.....	.. ..	Shunter	R. G. Duff.....	F. Cain..	119	Jacquet River.....
" 9	12.54	34	Passenger ..	H. B. Brand.....	O. Bourgeois.. ...	412	Maccan.....
" 12	9.00	.....	Shunter ...	. .....	W. F. Smallwood.	811	Moncton yard.....
" 16	14.15	.....	Mail Special	J. W. A. Pilon ...	E. Roy...	619	Near Yamaska.....
					G. Begin.....	443	Bridge .....
" 19	22.30	.....	Shunter	.....	J. Matheson.....	812	Campbellton .....
" 19	19.37	134	Passenger ..	J. B. Crockett....	G. B. Storey	605	Norton..... ...
" 21	9.00	.....	Freight.....	E. A. Smith	W. Megarity.....	17	Petitcodiac..... ..
" 25	9.30	.....	.. ..	....	Fred Wright (Hostler).	607	St. John yard.....

SESSIONAL PAPER No. 20

Continued.

the Year ended March 31, 1912.

Name of Person Injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict.
W. Payne	Brakeman	Fell from tender of engine	Arm broken	
Wm. Bugley	Neither	Supposed to have been struck by train.	Fatal	No blame to railway or employees.
G. A. Bonneau	Brakeman	Jumped from moving train	Slightly injured	
Daniel McIntyre	Neither	Found on track dead	Fatal	"
John Hibbitts	Shunter	Fell from cars	Slightly injured	
Richard MacLeod	Dining Car Cook	Fell from train	Fatal	"
Peter Avery	Neither	"	Badly injured.	
Edward Fortune	"	Found on track dead	Fatal	"
Robert Butler	Car repairer	While uncoupling cars	Left hand badly smashed.	
A. McLellan	Neither	Fell between freight shed platform and engine	Slightly injured	
John Shea	"	Found under train dead	Fatal	No inquest.
S. Turner	Trackman	Caught between plow and wing.	Shoulder and collar bones broken.	
T. Hebert	Neither	Struck by train while crossing tracks.	Fatal	Railway negligent.
Percy LeBlanc	Brakeman	Hand caught between draw bars.	Hand smashed	
A. Brilliant	Neither	Struck by train while crossing track.	Seriously injured	
S. C. Tuttle	Yardman	Knocked from a car by coming in contact with a post too close to track.	Fatal	Railway authoritiesat fault.
L. Mullins	"	Collision.	"	No inquest.
Arthur Lilly	Neither	"	"	
J. Robichaud	"		Leg cut off	
J. Brochu	"	Struck by train while walking on track.	Badly injured	
Murray Hanes	Brakeman	Caught between draw bars	"	
Herman Rafuse	"	Foot caught between steps of engine and platform.	Foot jammed	
Dennis Sweeney	Conductor	Thrown against door of van	Collar bone broken	
R. H. McEachan	Shunter	Got caught between cars	Head jammed	
Albert Lefebvre	Neither	Struck by train while walking on track.	Fatal	Accidental.
C. G. Ryan	Yardman	While coupling cars	Thumb crushed	
Wm. Lemieux	Brakeman	Fell from car	Foot injured	
J. J. Fielding	Lamplighter	Blown off semaphore	Slightly injured	
J. E. Litalien	Yardman	While coupling cars	Right hand crushed	
S. A. Steeves	Brakeman	Engines collided	Slightly injured	
Wm. Hoey	Fireman		"	
S. Malouin	Car foreman	Car fell on him	Fatal	Accidental.
Paul Allard	Brakeman	Jumped from moving train	Slightly injured	
Charles Porter	Passenger.	Attempted to get on moving train.	Left arm cut off	
G. W. Crossman	Brakeman	Foot caught between draw bars	Badly smashed	
E. Roy	Driver	Engines left rail	Badly injured	
J. A. Talbot	Fireman		"	
W. R. Gilker	Yardman	Got caught between	Slightly injured	
Miss Campbell	Passenger.	Fell on alighting from train	Bone in leg broken	
Earl Wright	Neither	Struck by train while crossing track.	Badly injured	
Thos. Jones	"	"	Slightly injured	
Fred Arnold	"	Fell under wheels of engine	Fatal	No inquest.

INTERCOLONIAL RAILWAY.

OFFICE OF THE ENGINEER OF MAINTENANCE,

MONCTON, N.B., May 27, 1912.

To Canadian Government Railways Managing Board,
Moncton, N.B.

GENTLEMEN,—I beg leave to submit the following annual report for the maintenance of the Windsor Branch railway for the year ending March 31, 1912.

TRACK.

During the year 11,569 feet of 56-lb. and 58-lb. rails were taken out of track and the same quantity of 67-lb. relaid.

TIES.

During the year 10,809 ordinary ties and 10 sets of switch ties were renewed.

SEMAPHORES AND SWITCHES.

Necessary repairs were made to all switches and all semaphores along the line.

FENCES.

Necessary repairs were made to existing fences on the branch.

WHARVES AND TRESTLES.

Necessary repairs were made to all wharves and trestles on line.

BRIDGES AND TRESTLES.

During the year the following bridges and culverts were repaired on the branch:—

Big Brook, bridge; Jordan, bridge; St. Croix, bridge; Stillwater, culvert.

BUILDINGS AND PLATFORMS.

During the year the following buildings and platforms were repaired on line:—

Beaver Bank, platform; Ellershouse, station; Mount Uniacke, platform; New Port, station; Windsor, engine house, station and platform.

Necessary repairs were made to hand-cars, trollies; and the track on the Windsor Branch, with the bridges and structures, has been kept in good repair during the year.

Yours truly,
T. C. BURPEE.

SESSIONAL PAPER No. 20

No. 1.—WINDSOR BRANCH RAILWAY.

REVENUE Account. Year ended March 31, 1912.

Expenditure.	$ cts.	Earnings.	$ cts.
Maintenance of way and structures	33,854 05	Passengers earnings	16,573 00
Balance	39,322 55	Freight earnings	55,451 76
		Mail earnings	1,151 84
	73,176 60		73,176 60

E. and O. E.
MONCTON, N.B.

S. L. SHANNON,
Comptroller and Treasurer.

No. 2.—WINDSOR BRANCH RAILWAY.

MAINTENANCE of Way and Structures. Year ended March 31, 1912.

—	$ cts.
Superintendence	3,548 19
Ballast	10 00
Ties	2,299 79
Rails	1,999 27
Other track material	1,372 01
Roadway and track	10,938 57
Removal of snow, sand and ice	808 89
Bridges, trestles and culverts	10,008 66
Grade crossings, fences, cattle guards and signs	919 22
Signals and interlocking plants	17 70
Buildings, fixtures and grounds	1,376 46
Docks and wharves	169 90
Railway tools and supplies	225 30
Stationery and printing	22 66
Other expenses	137 43
	33,854 05

E. and O. E.
MONCTON, N.B.

S. L. SHANNON,
Comptroller and Treasurer.

No. 3.—WINDSOR BRANCH RAILWAY.

GENERAL Balance. Year ended March 31, 1912.

DR.	$ cts.	CR.	$ cts.
To stores department	113,293 11	By Dominion account	13,293 11

E. and O. E.
MONCTON, N.B.

S. L. SHANNON,
Comptroller and Treasurer.

No. 4.—WINDSOR BRANCH RAILWAY.

Statement of Monthly Receipts—One-Third Earnings.

Months.	Passenger Earnings.	Freight Earnings.	Mail Earnings.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.
1911—				
April	954 97	2,426 73	95 68	3,477 38
May	996 75	2,254 66	95 68	3,347 09
June	1,323 84	2,158 91	95 68	3,578 43
July	1,772 87	1,987 88	96 90	3,857 65
August	2,445 97	2,700 95	96 91	5,243 83
September	2,495 63	7,781 92	96 91	10.374 46
October	1,478 82	9,109 73	95 68	10,684 23
November	1,392 92	7,663 11	95 68	9,151 71
December	1,353 94	5,793 51	95 68	7,243 13
1912—				
January	762 57	4,989 10	95 68	5,847 35
February	744 29	5,018 99	95 68	5,858 96
March	850 43	3,566 27	95 68	4,512 38
	16,573 00	55,451 76	1,151 84	73,176 60

E. and O. E.
MONCTON, N.B.

S. L. SHANNON,
Comptroller and Treasurer.

SESSIONAL PAPER No. 20

PRINCE EDWARD ISLAND RAILWAY.

OFFICE OF THE CHIEF ENGINEER,
MONCTON, N.B., June 14, 1912.

DEAR SIR,—I have the honour to submit the following report on capital account expenditure for the fiscal year ending March 31, 1912.

BRANCH LINE HARMONY TO ELMIRA.

The contractors completed their work in connection with this branch line, excepting about 5 miles of tracklaying and some minor culverts. These will be completed in 1912-13.

The ballasting of the line is being done by the railway, and about 3½ miles completed.

A passenger station was erected at Elmira.

TO INCREASE ACCOMMODATION AT SUMMERSIDE.

The railway wharf was widened 10 feet and a freight shed erected on the old wharf.

A hinged lifting gangway was built in the wharf to facilitate the handling of freight to and from the steamers.

BRANCH LINE O'LEARY TO WEST POINT.

A location survey was made, plans, specifications and estimates prepared for this branch line 13·2 miles. Tenders were asked and contract awarded and afterwards cancelled. Expropriation plans for the right-of-way were deposited of record in the registrar's office for the county.

BRANCH LINE FROM KENSINGTON TO STANLEY BRIDGE VIA LONG RIVER AND CLIFTON.

Location survey plans, specifications and estimates were prepared for this branch line. Part of the line from Clifton bridge to Stanley bridge, 3·84 miles, was advertised for tender. Expropriation plans for the right-of-way were deposited of record in the registrar's office for the county.

EXTENSION TO FREIGHT SHED ON WHARF AT SOURIS.

This appropriation was to cover the cost of work done in the previous year.

ADDITION TO STATION AT TIGNISH.

The old baggage-room was converted into a men's waiting-room. The old waiting-room converted into an office for the agent and ticket office, and the old ticket office made into a ladies' waiting-room.

A new bagage-room was built.

ROLLING STOCK.

Fifteen 30-ton Hart-Otis convertible cars for handling coal and one oil tank car were constructed in the railway shops at Charlottetown.

I have the honour to be, sir,
Your obedient servant,

WM. B. MACKENZIE,
Chief Engineer.

D. POTTINGER, Esq., I.S.O.,
Asst. Chairman, G.R.M. Board,
Moncton, N.B.

PRINCE EDWARD ISLAND RAILWAY.

SUPERINTENDENT'S OFFICE,

CHARLOTTETOWN, P.E.I., May 11, 1912.

SIR,—I have the honour to submit the following report of the working of the Prince Edward Island railway, for the fiscal year ended March 31, 1912.

I also enclose the report of the mechanical superintendent, and the following statements prepared by the accountant and auditor, and the mechanical accountant and storekeeper:—

No. 1. Capital.
2. Revenue.
3. Maintenance of way and structures.
4. Maintenance of equipment.
5. Traffic expenses.
6. Transportation expenses.
7. General expenses.
8. General stores.
9. General balance.
10. Statement of averages.
Statement of receipts.
Passenger statement.
Freight statement.
Descriptive statement of freight transported.

A. Statement showing the number of locomotives and the various classes of cars.
B. Statement showing the mileage made, and the coal, oil and waste consumed by locomotives.

The mileage of the railway in operation during the year was the same as last year, 267·5 miles.

CAPITAL ACCOUNT.

The expenditure to March 31, 1911, was $8,559,685.47.
The additions during the year were as follows:—

Branch line, Harmony to Elmira	$89,413 36	
Rolling stock	19,823 11	
Extension to freight shed on wharf at Souris	1,812 93	
Increased accommodation, Summerside	9,217 00	
Addition to station at Tignish	990 24	
Branch line, O'Leary to West Point	2,676 74	
Branch line, Kensington to Stanley	3,508 53	
Original construction	600 00	
		128,041 91
Making the total on March 31, 1912		$8,687,727 38

Rolling stock.—Fifteen 30-ton Hart-Otis convertible cars for handling coal and one oil tank car were constructed in the railway works at Charlottetown.

Extension to freight shed on wharf at Souris.—This work was done last year, and an amount sufficient to meet the cost of it was voted this year.

Increased accommodation, Summerside.—An extension was built to the railway wharf, which was done by contract. The Chief Engineer will be able to explain more fully in regard to this work. An addition was also built to freight shed on the wharf.

Addition to station at Tignish.—This consists of a baggage-room and a ladies' waiting-room.

Original construction.—This amount was voted for the purpose of paying for a portion of the railway right-of-way within the city of Charlottetown, owned by the late Lady Wood, which was not previously settled for.

All other expenditures on capital account for the current year will be more fully explained by the Chief Engineer in his report.

REVENUE ACCOUNT.

The revenue, which has shown a steady increase for some years, was the largest in the history of the road, thus indicating continued general prosperity throughout the province.

The gross earnings and working expenses for the year compare as follows:—

Gross earnings	$ 367,203 39
Working expenses	449,962 91
Difference	$ 82,759 52

The gross earnings compare with the previous year as follows:—

In 1910-11	$ 337,419 55
1911-12	367,203 39
Increase	$ 29,783 84

The earnings from passenger traffic compare as follows:—

In 1910-11	$ 142,503 41
1911-12	153,284 42
Increase	$ 10,781 01

The earnings from freight traffic compare as follows:—

In 1910-11	$ 158,841 61
1911-12	176,861 68
Increase	$ 18,020 07

The earnings from mails and sundries compare as follows:—

In 1910-11	$ 36,074 53
1911-12	37,057 29
Increase	$ 982 76

The number of passengers carried compare as follows:—

	Number.
In 1910-11	356,761
1911-12	388,076
Increase	31,315

The weight of freight carried compares as follows:—

	Tons.
In 1910-11	108,263
1911-12	120,218
Increase	11,955

WORKING EXPENSES.

The working expenses compare with the previous year as follows:—

In 1910-11	$ 424,104 00
1911-12	449,962 91
Increase	$ 25,858 91

The averages compare with the previous year as follows:—

Per Mile run by Locomotives.

	Cents.
In 1910-11	93 81
1911-12	103·84

Per Mile run by Trains.

	Cents.
In 1910-11	127·86
1911-12	127·43

Expenditure per Mile of Railway.

In 1910-11	$ 1,588 40
1911-12	1,685 25

TRACK.

38,100 railway ties in main line track, 907 ties in sidings, 40 sets switch ties, and 32 head-blocks and frames were renewed.

1,200 feet 50-lb. steel rails were laid in yard at Tignish to replace iron rails.

Fifty-six pound steel rails were laid in the following places:—90 feet and a new frog in main line at Kensingson to replace rails in bad order; 360 feet and three new frogs in main line at Charlottetown to replace 50-lb. rails and worn out frogs; 60 feet and a new frog in main line at St. Teresa to replace worn rails; 500 feet in main line on Vernon Branch to replace mixed rails; 24 feet in main line at Wood Island to replace worn rails; and 100 feet on main line at Murray Harbour to replace bad rails.

12 hand-cars were rebuilt, and 12 track levels and lifting boards made.

SIDINGS.

At Alberton 400 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Wellington 288 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Summerside 532 feet of 50-lb. steel rails were laid on siding to replace iron rails, and a new siding, 893 feet in length, was laid with 50-lb. rails, new switch gear, and a frog, on Holman's wharf.

At Cape Traverse 380 feet of new siding, of 50-lb. steel rails, a new frog, and switch gear, was put in at Silliker's Crossing, near Cape Traverse.

At New Zealand 528 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At St. Charles 240 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Five Houses 364 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At lot 40, Starch Factory, 600 feet of 50-lb. steel rails were laid on siding to replace iron rails.

At Douglas 332 feet of 50-lb. steel rails were laid on siding to replace iron rails.

FENCING.

42,023 feet new Page wire fence was erected on cedar posts. 3,180 feet permanent snow-fence, and 101 panels portable snow-fence were built. A large quantity of temporary snow-fence was erected with brush and other material.

All fences were repaired where necessary.

BALLASTING.

1,244 cars ballast, containing 11,196 cubic yards, were used on track, making $10\frac{1}{10}$ miles track ballasted.

265 cars of cinders, containing 1,935 cubic yards, were used, making $2\frac{1}{2}$ miles track ballasted.

BRIDGES.

At Charlottetown the Hillsborough bridge had all its piers repaired and pointed, and a new hardwood covering 4-inch plank was put down between the rails.

At Cardigan a new covering of 20 hard pine ties was placed on Scrimegor's bridge.

At St. Peter's and Midgell the stone-work of bridges was repaired and pointed.

At Pine Brook the stone-work of bridge was repaired and pointed, and iron-work scraped and painted.

At Naufrage, O'Leary, Kelvin, Freetown, Bradalbane, Hunter River, Loyalist, and Milton the iron-work of bridges was scraped and painted.

At Ellerslie 4 hard pine ties were put on covering of bridge.

At Northam 24 hard pine ties were placed on covering of bridge.

At Emerald two bridges had their iron-work scraped and painted.

CULVERTS.

At Freetown a new concrete pipe culvert, 28 feet long, 18 inches in diameter, was put in to replace a wooden one.

At Charlottetown 3 new iron pipe culverts and three new wooden culverts were put in to replace old culverts worn out.

At St. Peter's a new iron pipe culvert was put in.

At Suffolk a new concrete pipe culvert, 16 feet long, 18 inches in diameter, was put in, replacing a wooden culvert.

27 wooden culverts were rebuilt with hemlock and other timber.

All stone culverts received repairs where necessary.

33 cattle-guards were rebuilt with hemlock timber, hard pine stringers, and hemlock mud sills.

WHARVES AND BREASTWORKS.

At Summerside the wharf was repaired and a new covering placed on it. Breastwork was repaired.

At Georgetown the wharf received new stringers and was repaired where necessary.

At Souris new fenders were placed on wharf, and the wharf was repaired.

BUILDINGS AND PLATFORMS.

Tignish.—Station and dwelling were painted outside. Engine-house, freight-house, and section tool-house were repaired.

Alberton.—Section tool-house, and doors and locks of station were repaired.

Elmsdale.—Doors and windows of station were repaired.

Piusville.—Doors and windows of station were repaired.

Bloomfield.—Repairs were made to station doors and windows and roof of station. Flue in agent's dwelling was repaired.

Howlan.—A new station, containing freight-room and waiting-room, was built. This building is 16 feet x 26 feet.

O'Leary.—Station platform and roof of office were repaired.

Coleman.—Doors and windows of station were repaired.

Portage.—Freight-house doors were repaired.

Port Hill.—A new station platform was built. Agent's dwelling, and station doors and windows were repaired.

Richmond.—A new station platform was provided.

Miscouche.—Doors and windows of station, and station platform were repaired.

Summerside.—Part of the coal shed on the wharf was rebuilt, and light repairs made to all buildings. A new ice-house was built, and repairs made to track scales.

Kensington.—Station doors and windows were repaired.

Traveller's Rest.—A new station, 11 x 25 feet, was built.

New Annan.—A new station, 11 x 25 feet, was built.

Emerald.—Doors and windows of station were repaired, also flue in Agent's house.

Bradalbane.—Station doors and windows and roof of freight-house were repaired. New storm doors were placed on Agent's dwelling. Station and dwelling were painted outside two coats of paint.

Fredericton.—A new stock-pen was built.

Freetown.—Agent's dwelling, station platform and station-house were repaired.

North Wiltshire.—A new stock-pen was built. Station and station platform received light repairs.

Royalty Junction.—A new Agent's dwelling was built, which was painted both inside and outside with one coat of paint.

Charlottetown.—New store building was sheathed inside, and the interior otherwise completed, and the interior and exterior of new work was painted. Roof of freight-shed on wharf and roof of Power-house were repaired, and light repairs made to all other buildings at Charlottetown.

Souris.—Engine-house received general repairs, as the roof of this building was carried away twice by storms. Windows and doors of station and dwelling were repaired. A new stock-pen was erected on the wharf, and a new covering on track scales.

Bear River.—Station-house and Agent's dwelling were repaired.

Harmony.—Doors and windows and locks of station were repaired.

St. Peter's.—The stock-pen was rebuilt.

Marie.—A new station platform, 80 feet long, was provided.

St. Andrew's.—Station was repaired.

Mt. Stewart.—A new station with baggage-room, freight-sheds, and Agent's dwelling combined was built to replace the old station, which was destroyed by fire. This building was completed by our track carpenters. It was painted two coats of paint outside, and oil finished and varnished inside. New Fairbanks scales were placed in freight-room.

Scotchfort.—A new station, 16 x 26 feet, was built, containing waiting-room and freight-room, to replace station destroyed by fire.

Tracadie.—Station doors and windows were repaired.

Bedford.—A new station platform, 90 feet long, was laid.

York.—A new storm door was placed on the waiting-room, and necessary repairs made to doors and windows of station.

Peake's.—A new cattle-loader was erected. Station was repaired.

Cardigan.—The office and waiting-room were sheathed, and new hardwood floors laid in each. Two new doors for waiting-room and office, a new telegraph table for office, and a new counter across the office were provided. The old flue was taken down and rebuilt.

Georgetown.—Station platform was repaired.

Montague.—A new station platform, 150 feet long, was built. Windows and doors, and locks of station were repaired. Water tank was set up.

All other buildings along the line of railway were repaired where necessary.

Several sign-boards were renewed at stations along the line, and a large number of crossing sign-boards repainted.

STORES.

The value of stores purchased was	$121,811 65
The value of stores used was	132,621 92
The value of material sold was	3,902 88
The value of stores on hand at the end of the year was:—	
Miscellaneous	$ 34,925 53
Fuel	14,215 40
Roadway and bridge material	14,407 63
	$63,548 56

GENERAL.

The rolling stock, roadbed and buildings have all received careful attention, and are in a state of efficiency.

I enclose a return of casualties which occurred during the year.

I have the honour to be, sir,
Your obedient servant,

H. McEWEN.
Superintendent.

D. Pottinger, Esq., I.S.O.,
Assistant Chairman, Government Railways Managing Board,
Moncton, N.B.

PRINCE EDWARD ISLAND RAILWAY.

Office of the Mechanical Superintendent,

Charlottetown, P.E.I., April 11, 1912.

G. A. Sharp, Esq.,
Superintendent, P.E.I. Ry.

Sir,—I beg to submit for your information the following statement of the operation of the Mechanical Department for the year ended March 31, 1912.

The following is a summary of the principal work performed:—

LOCOMOTIVES.

Twelve locomotives received thorough repairs. Eight locomotives received side and main rod brasses. All the motion and running gear thoroughly examined, staybolts in boilers thoroughly examined, and six hundred and forty new staybolts put in boilers.

Twelve locomotives received specific repairs.

Eight locomotives received new pistons and twelve piston rods. Four tender tanks and four tender frames were largely rebuilt. Eight fireboxes were patched. Eight crossheads were made and seventeen were tinned and planed.

The following new parts were supplied:—

Sixteen truck boxes, eleven driving boxes, seventeen pops, three whistles, twenty-four pop valves, twenty-four valve stems, twenty-three slide valves, three hundred and thirty-six sets metallic packing, fourteen cylinder cocks, six blow-off cocks, thirty-six punches, nine smoke stacks, four tube expanders, one hundred truck straps, four truck bolsters, thirty-four brass valve spindles, eight valve yokes, sixteen check valves, eleven bell ringers, four crank pins, nine taps, thirteen injector spindles, three steam pipes, two throttle glands, two driving axles and one bracket.

One hoisting engine fitted out and thirteen injectors repaired.

One hundred and ninety-two engine oil boxes, fourteen piston rod oil cups, four slush boxes, eight slide blocks, fifty brake levers, sixty brake jaws, two hundred and seventy-five brake pins and one hundred and fifty brake bolts were bored and fitted out. Thirty-eight sets driving wheels, twenty-eight sets engine truck wheels, one hundred and nine sets steel wheels, and eighty-three new axles were turned off. One hundred and twenty-four sets wheels were pressed on axles. Three hundred and twenty-five new tubes and one thousand, six hundred and ninety-eight tubes were welded and put in boilers. Sixty-seven thousand, six hundred and seventy-four pounds of iron and four thousand, six hundred and one pounds of steel were forged; four thousand, seven hundred and eighty-six pounds of nuts were tapped, and a great deal of running repairs too numerous to mention.

CAR DEPARTMENT.

Fifteen Hart-Otis convertible dump carts were built and charged to capital. Four flat cars and four engine cabs were rebuilt and charged to renewals.

The following received heavy repairs:—

Twenty-one first-class cars, fourteen second-class cars, nineteen postal and baggage cars, ninety-four box cars, forty-one flat cars, four stock cars, two flangers, one van, and one painters' car.

The following received light repairs:—

Fifty-one first-class cars, twenty-five second-class cars, fifty-one box cars, sixty-nine flat cars, twenty-four postal and baggage cars, one van, eight snow ploughs, and four flangers.

Two cars were resheathed and one postal and baggage car was changed to a second-class car.

Eighty-three oil boxes, ninety-three sashes, eleven brake beams, four hundred and seventy-five car castings, one hundred and forty car frictions, twenty-eight sets car housings, one hundred brake hanger hooks, eleven buffers, sixty links, twenty doors, and eight sets of passengers car trucks were made. Eighty-three sets wheels and fourteen new roofs were put on cars.

BRASS FOUNDRY.

Output.—13,874 pounds of brass castings.

COPPER SHOP.

Eighteen headlights, two headlight cases, five copper pipes, four elevator and feed pipes, fourteen discharge pipes, six injector pipes, six oil pipes, twenty station lamps, thirteen trainmen's lamps, four passenger car lamps, seventeen switch lamps, six lamps for road department, eight engine lamps, three semaphore lamps, eleven water glass shields, forty-eight engine oil cans, forty-nine station oil cans, and sixteen water cans were repaired.

Eighty-eight engine truck funnels, four sand pipes, twenty-four wire joints for steam chests, four hand rails, fourteen water glass shields, nine smoke stacks, one sprinkler, one galvanized iron tank for boiler shop, thirty-two overflow pipes, and two snow excluders were made.

Lead lined forty car bearings.

Seven driving boxes, twenty sets truck boxes, twenty-five crossheads, and six truck boxes were babbitted.

Four crossheads, seven sets rod brasses and one ice-box were tinned.

Nine copper pipes softened and examined.

Repaired lagging on three boilers, and piped from injector to ashpan in three engines.

PAINT SHOP.

Nine locomotives were painted and varnished.

Fifteen Hart-Otis dump cars were painted. Six first-class cars were painted, eight cleaned, and twelve varnished: three postal and baggage cars were painted, eight cleaned, and eight varnished; two second-class cars were painted, five cleaned, and five varnished; one hundred and thirty-nine box cars were painted, and one hundred and thirty-six box car roofs were painted; forty-eight flat cars, three snow-ploughs, fifteen hand-cars, seven water coolers, three sets sashes, fourteen track levels, fifty-three water cans, fifteen tender houses, four seats, and thirty sashes were painted. Six sets outside sashes varnished, five desks filled and varnished, fourteen track levels lettered. Iron work under roof of Charlottetown station scraped and painted. Ticket office and waiting-room, Cardigan station, painted.

Fifty-one sashes glazed, twenty-eight sign boards lettered; four lounges, three rooms, and four tool boxes stained and varnished. Thirty-eight box cars relettered and three hundred and ten panes of glass put in buildings.

ROAD AND TRAFFIC DEPARTMENT.

Forty loading platforms, one coal hoist platform, two freight trucks, four hand-cars, three cattle loaders, six sheep loaders, one baggage truck, six coal boxes, four tool boxes, two storage boxes, one semaphore box, twelve sign boards, two bill boards, three grindstone stands, twelve track levels, ten switch targets, two ladders, four hundred stakes, eight doors, six seats, four desks and one desk top, thirty-four claw bars, eighty chisels, two hundred and fifty rail braces, one hundred and sixty-five picks, six wrenches, ten posthole diggers, seventy-five plough links, fifty-six switch links, fourteen switch headers, six switch cranks, twenty-four frogs, sixty-nine pairs fish plates, twelve gate hinges, one blind switch grade, and three tables for train service were made.

Six hand-cars were rebuilt. Three hand-trucks, fifteen freight-trucks, two baggage-trucks, two hand-cars, four cash boxes, six coal boxes, four tanks, one turntable, seven trollies, and three doors were repaired.

Two tank boilers received new tubes, stay bolts and fireboxes. All tank boilers repaired.

Boiler of steam shovel patched, two new locking jacks and the machinery thoroughly repaired.

New crane for Charlottetown boiler shop and three ventilators put in Charlottetown coal shed.

I am pleased to say our rolling stock has been kept in a high state of efficiency.

I have the honour to be, sir,
Your obedient servant.

W. S. POOLE,
Mechanical Superintendent.

PRINCE EDWARD ISLAND RAILWAY.

STATEMENT showing the number of locomotives and the various classes of cars and other Rolling Stock, on March 31, 1912.

—	Locomotives.	Classification of Cars.																	Snow ploughs.	Flangers.	Total.	Steam shovel.
		1st class.	2nd class.	Combined 2nd and baggage.	Postal and smoking.	Combined postal and baggage.	Baggage.	Pay car.	Vans.	Box-freight.	Refrigerator cars.	Stock.	Oil tank car.	Hart-Otis convertible cars.	Coal.	Platform.	Total.					
On hand, serviceable, March 31, 1911	31	23	9	7	4	3	4	1	3	310	3	21	....	....	22	138	546	9	9	18	1
Condemned, April 1, 1911	..	....	3	....	....	1	2	..	1	3	....	....	....	....	...	9	21	1	....	1	
Total equipment, April 1, 1911	31	23	12	7	4	4	6	1	4	313	3	21	....	....	22	147	567	10	9	19	1
Built during the year and charged to Capital	....	....	....	....	....	....	....	....	....	....	....	....	1	15	....	...	16	....	...	....	....
Transferred as follows :—																					
From Combined Postal and Baggage to 2nd Class	....	..	1	....	....	1	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....
From Pay Car to 2nd Class	....	...	1	....	....	....	.	1	....	....	....	....	....	....	....	....	....	....	....	....	....
From Coal to Stock	....	....	....	....	....	....	....	....	....	....	....	7	....	....	7	....	....	....	....	....	....
From Coal to Box	....	....	....	....	....	....	....	....	....	....	....	....	..	...	3	3	....	....	....	....	....
Total	31	23	14	7	4	3	6	0	4	313	3	28	1	15	12	150	583	10	9	19	1
Condemned, April 1, 1911	...	...	3	2	....	1	2	....	1	3	....	....	....	..	....	9	21	1	....	1	....
Condemned during the year	9	4	1	...	....	....	..	..	...	4	...	....	....	...	....	....	9	....	....	....	....
Total condemned	9	4	4	2	....	1	2	....	1	7	...	....	....	...	....	9	30	1	....	1	....
Less rebuilt during the year	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	4	4	....	....	....	....
To be rebuilt or purchased	9	4	4	2	...	1	2	....	1	7	...	....	....	....	....	5	26	1	....	1	....
Add serviceable and repairing	22	19	10	5	4	2	4	....	3	306	3	28	1	15	12	145	557	9	9	18	1
Total equipment, March 31, 1912	31	23	14	7	4	3	6	....	4	313	3	28	1	15	12	150	583	10	9	19	1

S. F. HODGSON,
Mechanical Accountant.

PRINCE EDWARD ISLAND RAILWAY.

STATEMENT of Mileage and Coal, Oil and Waste consumed by Locomotives for the year ended March 31, 1912.

—	Locomotive Mileage.	Consumption.				Average Consumption per 100 Miles.			
		Tons of Coal.	Pints of Valve Oil.	Pints of Engine Oil.	Pounds of Waste.	Pounds of Coal.	Pints of Valve Oil.	Pints of Engine Oil.	Pounds of Waste.
1911.									
April	27,708	743	320	672	561	6,007	1·15	2·42	2·02
May	35,750	1,042	416	908	733	6,529	1·16	2·54	2·05
June	35,742	954	424	996	674	5,979	1·18	2·78	1·88
July	40,772	1,045	520	1,252	879	5,741	1·27	3·07	2·15
August	42,779	1,056	624	1,248	808	5,529	1·46	2·91	1·89
September	44,248	1,138	596	1,248	743	5,761	1·34	2·82	1·67
October	41,272	1,224	604	1,282	656	6,643	1·46	3·10	1·58
November	40,743	1,192	656	1,228	647	6,553	1·61	3·01	1·58
December	37,006	1,102	400	916	676	6,670	1·08	2·47	1·82
1912.									
January	34,222	1,034	512	1,048	676	6,768	1·49	3·06	1·97
February	34,049	1,070	600	1,048	653	7,039	1·76	3·07	1·91
March	36,220	1,156	516	1,072	563	7,149	1·42	2·96	1·55
Totals	450,511	12,756	6,188	12,918	8,269	6,342	1·37	2·86	1·83

S. F. HODGSON,
Mechanical Accountant.

No. 1.—PRINCE EDWARD ISLAND RAILWAY.

Capital Account—Twelve Months ended March 31, 1912.

1911.	Dr.		$ cts.	1911.	Cr.	$ cts.
Mar. 31..	To cost of P. E. I. Railway to date		8,559,685 47	Mar. 31..	By Dominion of Canada	8,559,685 47
1912.				1912.		
Mar. 31..	To Branch Line, Harmony to Elmira	$ 89,413 36		Mar. 31..	By Dominion of Canada	128,041 91
	Rolling Stock	19,823 11				
	Inc. Accommodation, Summerside	9,217 00				
	Branch Line, Kensington to Stanley	3,508 53				
	" O'Leary to West Point	2,676 74				
	Extension to Freight Shed on Wharf at Souris	1,812 93				
	Addition to Station at Tignish	990 24				
	Original Construction	600 00				
			128,041 91			
			8,687,727 38			8,687,727 38

E. & O. E.

W. T. HUGGAN,
Accountant and Auditor.

No. 2.—PRINCE EDWARD ISLAND RAILWAY.

Revenue Account—12 Months ended March 31, 1912.

Expenditure.	$ cts.	Earnings.	$ cts.
Maintenance of way and structures....	115,416 03	Passenger.....	153,284 42
Maintenance of equipment.....	88,598 64	Freight	176,861 68
Traffic expenses.	1,107 33	Mails and express.....	26,471 40
Transportation expenses.....	229,647 01	Miscellaneous	10,585 89
General expenses	15,193 90		
			367,203 39
		Balance	82,759 52
	449,962 91		449,962 91

E. & O. E.
Charlottetown, P. E. I.

W. T. HUGGAN,
Accountant and Auditor.

No. 3.—PRINCE EDWARD ISLAND RAILWAY.

Maintenance of Way and Structures—12 Months ended March 31, 1912.

	$ cts.
1. Superintendence....	3,287 43
2. Ballast.....	5,508 72
3. Ties	13,716 01
4. Rails	370 31
5. Other track material.....	2,834 36
6. Roadway and track.....	59,819 67
7. Removal of snow and ice.....	8,994 01
9. Bridges, trestles and culverts.....	1,200 85
11. Grade crossings, fences, cattle guards and signs..	6,990 57
12. Snow and sand fences, and snow sheds	853 29
13. Signals and interlocking plants.....	53 27
14. Telegraph and telephone lines.....	528 33
16. Buildings, fixtures and grounds.....	7,694 28
17. Docks and wharves	1,358 93
18. Roadway tools and supplies.....	1,926 76
20. Work equipment, renewals.....	
23. Stationery and printing.....	269 24
25. Other expenses.....	10 00
	115,416 03

E. & O. E.
Charlottetown, P. E. I.

W. T. HUGGAN,
Accountant and Auditor.

SESSIONAL PAPER No. 20

No. 4.—PRINCE EDWARD ISLAND RAILWAY.

Maintenance of Equipment—12 Months ended March 31, 1912.

		$ cts.
No. 28.	Superintendence	7,225 08
29.	Steam locomotives, repairs	34,666 08
35.	Passenger train cars, repairs	18,684 42
36.	" " " renewals	
38.	Freight " " repairs	14,595 98
39.	" " " renewals	1,349 82
47.	Shop machinery and tools	3,598 51
49.	Injuries to persons	92 52
50.	Stationery and printing	252 59
52.	Other expenses	7,199 63
54.	Work equipment, repairs	934 01
		88,598 64

E. & O. E.
CHARLOTTETOWN, P.E.I.

W. T. HUGGAN,
Accountant and Auditor

No. 5.—PRINCE EDWARD ISLAND RAILWAY.

Traffic Expenses—12 Months ended March 31, 1912.

		$ cts.
No 57.	Superintendence	36 50
58.	Outside agencies	136 62
59.	Advertising	924 71
60.	Stationery and printing	7 50
65.	Other expenses	2 00
		1,107 33

E. & O. E.
CHARLOTTETOWN, P.E.I.

W. T. HUGGAN,
Accountant and Auditor.

No. 6.—PRINCE EDWARD ISLAND RAILWAY.

Transportation Expenses—12 Months ended March 31, 1912.

		$ cts.
No. 66	Superintendence	6,124 92
67	Despatching trains	2,992 66
68	Station employees	52,921 11
72	Station supplies and expenses	5,862 19
73	Yardmasters and their clerks	2,480 14
74	Yard conductors and brakemen	2,591 44
76	Yard supplies and expenses	20 67
77	Yard enginemen	5,232 28
78	Enginehouse expenses, yard	1,456 57
79	Fuel for yard locomotives	3,511 01
80	Water for yard locomotives	60 00
81	Lubricants for yard locomotives	116 34
82	Other supplies for yard locomotives	100 81
86	Road enginemen	26,612 87
87	Enginehouse expenses, road	12,884 37
88	Fuel for road locomotives	42,553 82
89	Water for road locomotives	2,032 89
90	Lubricants for road locomotives	974 27
91	Other supplies for road locomotives	994 45
94	Road trainmen	37,104 95
95	Train supplies and expenses	7,041 29
96	Interlockers, block, and other signals, operation	28
98	Draw bridge operation	653 64
99	Clearing wrecks	64 54
100	Telegraph and telephone, operation	7,975 73
101	Operating floating equipment	205 64
103	Stationery and printing	6,004 18
105	Other expenses	42 12
106	Loss and damage, freight	374 50
107	Loss and damage, baggage	2 75
108	Damage to property	587 18
109	Damage to stock on right of way	49 00
110	Injuries to persons	18 40
		229,647 01

E. & O. E.,
Charlottetown, P.E.I.

W. T. HUGGAN,
Accountant and Auditor.

No. 7.—PRINCE EDWARD ISLAND RAILWAY.

General Expenses—12 Months ended March 31, 1912.

		$ cts.
No. 113	Salaries and expenses of General Officers	1,603 75
114	Salaries and expenses of clerks and attendants	7,111 42
115	General office supplies and expenses	478 76
116	Law expenses	52 25
118	Relief Department expenses	5,037 56
120	Stationery and printing	687 27
121	Other expenses	222 89
		15,193 90

E. & O. E.,
Charlottetown, P.E.I.

W. T. HUGGAN,
Accountant and Auditor.

SESSIONAL PAPER No. 20

No. 8.—PRINCE EDWARD ISLAND RAILWAY.

General Stores Account—12 Months ended March 31, 1912.

1911.	Dr.	$ cts.	$ cts.
March 31.. ..	To Balance brought forward.....	... .	61,007 05
1912.			
March 31.....	To Purchases during the year.....	121,811 65	
	Charges from other departments.....	6,122 77	
	Labour,.....	4,463 30	
	Pay rolls.....	6,668 59	
			139,066 31
			200,073 36
1912.	Cr.		
March 31.....	By Issues during the year.....		136,524 80
	Balance .. Ordinary stores, including stationery.....	34,925 53	
	Balance .. Fuel.....	14,215 40	63,548 56
	Balance .. Roadway and bridge material.....	14,407 63	

E. & O. E.
Charlottetown, P.E.I.

W. T. HUGGAN,
Accountant and Auditor.

No. 9.—PRINCE EDWARD ISLAND RAILWAY.

General Balance—12 Months ended March 31, 1912.

Dr.	$ cts.	Cr.	$ cts.
General stores.....	63,548 56	Dominion account.....	93,624 70
Post Office Department.....	16,209 88	Starr Manufacturing Co.....	1,241 60
Road and equipment, (Suspense).....	8,334 71	Canadian Car & Foundry Co.....	690 69
Station agents.....	3,866 02	Rhodes, Curry & Co.....	390 00
Cash	3,540 04	Bruce Stewart & Co.....	255 07
Galena Signal Oil Co.....	251 06	John Simon	114 38
Intercolonial Railway.....	82 77	Unclaimed wages.....	29 88
Militia Department...	73 62		
Rents....	51 87		
Judge Weatherbie	30 00		
Imperial Oil Co	20 45		
Grand Trunk Ry.	2 50		
Suspense account.....	334 84		
	96,346 32		96,346 32

E. & O. E.
Charlottetown, P.E.I.

W. T. HUGGAN,
Accountant and Auditor.

No. 10—PRINCE EDWARD ISLAND RAILWAY.

Statement of Averages. Year ended March 31, 1912.

Mileage of railway		267
Engine mileage		433,311
Total train mileage		353,116
Total car mileage		2,272,881
Ratio of earnings to gross earnings :—		
Passenger	Per cent	41·74
Freight	"	48·17
Mails and express	"	10·09
Gross earnings per mile of railway	Dollars.	1,375 26
" " engine mile	Cents.	84·74
" " train mileage	"	103·99
" " car mileage	"	16·16
Ratio of expenses to gross earnings :—		
Maintenance of way and structures	Per cent.	31·43
Maintenance of equipment	"	24·13
Traffic expenses	"	0·30
Transportation expenses	"	62·54
General expenses	"	4·14
Expenses per train mile :—		
Maintenance of way and structures	Cents.	32·70
Maintenance of equipment	"	25·09
Traffic expenses	"	0·31
Transportation expenses	"	65·03
General expenses	"	4·30
Expenses per mile of railway :—		
Maintenance of way and structures	Dollars	432 27
Maintenance of equipment	"	331 83
Traffic expenses	"	4 15
Transportation expenses	"	860 10
General expenses	"	56 90
Locomotive and car repairs, per locomotive and car :—		
Locomotives	Dollars.	1,575 73
Passenger cars	"	327 79
Freight cars	"	28 62

E. & O. E.
Charlottetown, P. E. I.

W. T. HUGGAN,
Accountant and Auditor

SESSIONAL PAPER No. 20

PRINCE EDWARD ISLAND RAILWAY.

Statement of Receipts.

Months.	Passenger Traffic.	Freight Traffic.	Mails and Express.	Total.
1911.	$ cts.	$ cts.	$ cts.	$ cts.
April	9,535 13	11,479 90	2,253 24	23,268 27
May	9,149 81	18,289 72	1,805 14	29,244 67
June	11,176 80	15,628 20	1,940 31	28,745 31
July	17,582 40	14,750 99	1,961 91	34,295 30
August	22,277 86	12,540 83	1,960 15	36,778 84
September	20,582 55	13,414 86	1,858 77	35,856 18
October	13,624 32	22,839 42	1,921 64	38,385 38
November	11,454 66	21,871 55	1,964 20	35,290 41
December	12,104 84	13,892 60	2,055 91	28,053 35
1912.				
January	9,152 74	8,683 63	3,170 51	21,006 88
February	6,981 36	9,549 73	8,042 35	24,573 44
March	9,661 95	13,920 25	8,123 16	31,705 36
1911-12	153,284 42	176,861 68	37,057 29	367,203 39
1910-1911	142,503 41	158,841 61	36,074 53	337,419 55

E. & O. E.

CHARLOTTETOWN, P.E.I.

W. T. HUGGAN,
Accountant and Auditor.

PRINCE EDWARD ISLAND RAILWAY.

Passenger Statement.

Months.	Local.		Through.		Total.	
	Number.	Mileage.	Number.	Mileage.	Number.	Mileage.
1911.						
April	27,588	538,051	105	5,206	27,693	543.257
May	25,881	454,245	735	33,582	26,616	487,827
June	26,581	548,378	1,481	72,062	28,062	620,440
July	44,997	1,061,644	2,704	162,639	47,701	1,224,283
August	38,104	784,319	5,855	268,417	43,959	1,052,736
September	45,218	1,159,431	3,219	163,648	48,437	1,323,079
October	28,703	630,548	3,086	180,823	31,789	811,371
November	28,502	562,746	1,875	87,517	30,377	650,263
December	37,550	689,798	780	38,164	38,330	727,962
1912.						
January	23,185	475,320	922	43,826	24,107	519,146
February	16,169	382,466	230	11,609	16,399	394,075
March	24,045	522,010	561	28,588	24,606	550,598
1911-12	366,523	7,808,956	21,553	1,096,081	388,076	8,905,037
1910-11	336,445	7,004,672	20,316	964,334	356,761	7,969,006

E. & O. E.

CHARLOTTETOWN, P.E.I.

W. T. HUGGAN,
Accountant and Auditor.

PRINCE EDWARD ISLAND RAILWAY.

Freight Statement.

Months.	1911-12.		1910-11.	
	Tons.	Mileage.	Tons.	Mileage.
April	7,066	253,279	8,064	268,607
May	12,235	448,504	9,446	353,189
June	11,033	383,041	11,740	395,025
July	9,609	346,961	8,045	286,353
August	7,936	300,511	6,851	264,498
September	9,479	315,157	8,408	289,810
October	16,476	591,483	11,600	360,402
November	14,727	588,829	14,071	469,391
December	8,684	387,231	9,549	335,657
January	5,360	253,817	4,379	162,383
February	7,436	295,254	7,436	260,938
March	10,177	454,714	8,674	331,810
	120,218	4,618,781	108,263	3,778,063

E. & O. E.

CHARLOTTETOWN, P. E. I.

W. T. HUGGAN,
Accountant and Auditor.

SESSIONAL PAPER No. 20

PRINCE EDWARD ISLAND RAILWAY.

DESCRIPTIVE STATEMENT of Freight transported, 12 Months ended March 31, 1912.

Products of :	Commodity.	Tons.
Agriculture	Grain	15,680
	Flour	3,573
	Other mill products	1,920
	Hay	5,268
	Tobacco	132
	Cotton	48
	Fruit and vegetables	10,551
Animals	Live stock	3,382
	Dressed meats	2,803
	Other packing house products	2,727
	Poultry, game and fish	4,255
	Wool	47
	Hides and leather	623
Mines	Anthracite	725
	Bituminous	11,621
	Stone, sand and other like articles	3,632
Lumber	Lumber	13,111
Manufactures	Petroleum	1,351
	Sugar	1,271
	Naval	12
	Iron, pig and bloom	205
	Other castings and machinery	621
	Iron and steel rails	487
	Bar and sheet metal	259
	Cement, brick and lime	2,612
	Agricultural implements	618
	Wagons, carriages, tools, &c	273
	Wines, liquors, beers	325
	Household goods and furniture	499
Miscellaneous	Other commodities not mentioned above	31,587
	Total weight	120,218

E. & O. E.

W. T. HUGGAN,
Accountant and Auditor.

PRINCE EDWARD ISLAND RAILWAY.

Details of Accidents for the period ending March 31, 1912.

Date.	Name, Adress and Occupation of Persons.	Place of Accident.	Cause.	Nature and Extent of Injury.
1911.				
April 3..	John Ferguson, section foreman, Morell	Morell	Hand car jumped track and he was thrown to ground	Broken ribs.
" 15..	John J. McKenzie, section foreman, St. Peter's	St. Peter's	While stepping off moving train slipped on icy platform and fell	Broken wrist.
June 19..	Mrs. A. Howatt, Summerside	Cape Traverse	While getting aboard train impact of cars threw her violently forward against hand rail of car	Badly shaked up and leg injured.
" 26..	Alfred E. McLean, section man, Port Hill	Port Hill	While lining track bars lipped	Rupture.
July 3..	Frank Dorsey, cleaner, Charlottetown	Charlottetown	While working in erecting shop, broke small bone in wrist	Wrist injured.
" 9..	Joseph Millman, engine driver, Charlottetown	Souris	Slipped while alighting from engine	Sprained ankle.
" 28..	John Moore, section man, Lot 40	Lot 40	Hand car derailed throwing men off	Broken rib.
" 29..	D. W. Swan, track carpenter, Charlottetown	Souris	While assisting to take lorry off track foot caught under rail	Ankle fractured.
Aug. 17..	James A. Hickey, fireman, Charlottetown	Charlottetown	While working at engine	Injured kneecap.
" 26.	Mrs. Herbert Mason, Clifton Farm, Lot 48	"	Thrown from carriage near Hillsborough Bridge. Horse became frightened by engine and ran away	Head cut, ribs and ankles bruised, and one ankle sprained, shoulder bruised, ear cut and partly torn away from head, left arm injured.
Oct. 6..	Peter Oliver, pit man, Charlottetown	"	While working at turntable slipped	Injured leg.
Nov. 9..	Owen Corr, labourer, Emerald	Emerald	While assisting at platform plank fell on foot, bruising toes	Injured foot.
" 21..	Major M. Galbraith, blacksmiths' helper, Charlottetown	Charlottetown	Chisel flew while working in boiler	Injured leg.
Dec. 9..	Arthur C. Clark, freight porter, Charlottetown	"	Stepped on a board, while lifting a plank, which tilted	Fractured ankle.
" 17..	Wm. Bell, cleaner, Charlottetown	"	While working at engine had arm scalded	Arm injured.
" 20..	Joseph Dorion, labourer, Charlottetown	"	While going through railway yard tripped on piece plank and fell	Broken ribs.
1912.				
Jan. 10..	Harold Moore, cleaner, Charlottetown	Charlottetown	While stepping from engine broke bone in ankle	Injured ankle.
" 13..	Bartholomew Paquet, fireman, Charlottetown	Souris	Strained his back while working around engine in Round House	Back injured.
" 25..	William Ramsay, farmer. Hamilton. P.E.I	Kensington	Struck by train while driving over railway crossing	Badly mangled and internally injured. Died about ten minutes after accident

1..	Robert McWilliams, fireman, Charlottetown.....	Charlottetown....	While stepping into engine hurt knee cap.....	Injured knee.....
" 12..	Wm. Munroe, cleaner, Charlottetown.....	"	Got hurt with bar while shaking fire in engine ...	Injury to side. . ..
March 8..	James Herrell, boiler washer, Charlottetown.....	"	Fell in Round House while working at an engine..	Broken ankle.
" 22..	Geo. H. Douglas, blacksmiths' helper, Charlottetown..	"	Was handling a piece of boiler plate..... ..	Injured wrist.

PRINCE EDWARD ISLAND RAILWAY.

Accidents during period ended March 31st, 1912.

Cause of Accident.	Passengers.		Employees.		Others.		Total.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1. Fell from cars or engine	....	.....	.....	4	.....	.....	.....	4
2. Jumping on or off trains while in motion	.....	1	.....	1	.....	.....	....	2
3. At work on or near the track making up trains	....	....	.....	.....	.....	....	.....	.....
4. Putting arms or heads out of windows	.....	....	.....	.....	.....	.....	....	....
5. Coupling cars	....	....	.....	...	.....	....	.....	....
6. Collisions or by trains thrown from track	.....	.....	.....	.....	.....	.....	.....	....
7. Struck by engines or cars on highway crossings	.....	.....	.....	.....	1	.....	1	.....
8. Walking, standing, lying, sitting or being on track	.....	.....	.....	.....	.....	.....	.....	.....
9. Explosions	.....	.....	.....	.....	.....	.....	.....	.....
10. Striking bridges	....	....	.....	.....	.....	....	.....	....
11. Other causes	....	.....	....	15	....	1	.....	16
Total	.....	1	.....	20	1	1	1	22

Charlottetown, P.E.I.
May 14th, 1911.

SESSIONAL PAPER No. 20

INTERCOLONIAL AND PRINCE EDWARD ISLAND RAILWAYS EMPLOYEES' PROVIDENT FUND.

FIFTH ANNUAL REPORT.

MONCTON, N.B., May 30, 1912.

To the Honourable FRANK COCHRANE,
Minister of Railways and Canals, Ottawa.

By instruction of the Board, we beg to submit for your information, the following report of the operations of the Provident Fund, for the fiscal year ended March 31, 1912.

The personnel of the Provident Fund Board for that year was as follows:—

D. POTTINGER, Assistant Chairman, Government Railways Managing Board, Chairman, Moncton, N.B.

W. A. DUBÉ, Superintendent I.C.R., Lévis, Que. } Appointed
T. C. BURPEE, Engineer of Maintenance, I.C.R., Moncton, N.B. } by the Minister.
Jas. W. NAIRN, Engineman, I.C.R., Truro, N.S. } Elected by the
WILLARD P. HUTCHINSON, Train Despatcher, I.C.R., Truro, N.S. } Employees.

Four regular meetings of the Board, as required by the regulations, were held during the year.

The following is a statement of the receipts and expenditures during the year ended March 31, 1912:—

Balance at the credit of the fund on March 31, 1911		$ 273,480 01
The contributions made by employees during the year, being one and one-half per cent of their monthly salary and wages, were	$ 81,119 81	
The contributions made by the railways of an equal amount, during the same period, were	81,119 81	
		162,239 62
Amount received for refunds, &c.		1,482 08
Interest accrued (at three per cent)		7,280 37
		$ 444,482 08

The expenditures were—

For retiring allowances	$ 125,131 32	
For contributions refunded in cases of deceased employees.	2,390 20	
For contributions refunded which were deducted in error.	307 96	
For contributions refunded to discharged employees	457 91	
Medical examinations for probationers entering service	2,104 00	
" " for employees retiring from service.	78 00	
For election expenses	491 28	
For salaries and travelling expenses, secretary's office	3,586 84	
For Board members	117 48	
For stationery, printing, postage, &c., &c.	582 38	
	$ 135,247 37	
Balance to credit of the fund on March 31, 1912		$ 309,234 71

The following statement shows the amount which was contributed by the railways, and the amount which was contributed by the employees to the Provident Fund in each fiscal year, since the fund has been in operation. It also shows the number of employees retired, the number of deaths among the same, and the amount paid

for retiring allowances in each year. The average amount of the retiring allowance paid in the month of March in each year is also shown:—

For Fiscal Year.	Amount contributed by Railways.	Amount contributed by Employees.	No. of Employees placed on Fund.	No. of retired Employees died.	Amount paid for Retiring Allowances.	Average monthly paid in March.	Balance at credit of Fund.
	$ cts.	$ cts.			$ cts.	$ cts.	$ cts.
1907–8.	82,707 74	82,707 74	142	11	23,923 04	25 49	139,249 21
1908–9.....	75,306 41	75,306 41	88	17	64,067 63	25 63	225,898 31
1909–10.....	69,949 70	69,949 70	168	17	103,628 20	26 30	255,585 08
1910–11.....	71,296 42	71,296 42	51	23	121,014 34	26 56	273,480 01
1911–12	81,119 81	81,119 81	29	23	125,131 32	26 04	309,234 71

It will be noted by the above statement of receipts and expenditures that the amount of the contributions received from the railways and from the employees during the year, were.. .. ..$ 162,239 62

And that the expenditures were.. .. .. 135,247 37

Surplus of contributions over expenditures.. .. .. 26,992 25

The gross surplus, including interest, to the credit of the fund on March 31, 1912, was.. .. ..$ 309,234 71

On March 11, 1912, Mr. Donald McDonald, Superintendent, I.C.R., Lévis, was appointed a member of the Board by the minister, in the room and stead of Mr. W. A. Dube, who had ceased to be a member.

The Act provides that two members of the Provident Fund shall be elected annually, and it was therefore necessary in January, 1912, to arrange for the election of these two members to serve the year ending March 31, 1913.

Notice calling for the nomination of candidates was accordingly posted as required by the rule, and the election was held in February, 1912.

The two members elected were:—

Willard P. Hutchinson, Train Despatcher, I.C.R., Truro, N.S.

W. Milledge Thompson, Conductor, I.C.R., Moncton, N.B.

The personnel of the Board as at present constituted, is as follows:—

D. Pottinger, Assistant Chairman, Government Railways Managing Board, Chairman, Moncton, N.B.

T. C. Burpee, Engineer of Maintenance, I.C.R., Moncton, N.B. } Appointed
D. McDonald, Superintendent, I.C.R., Lévis, Que. } by the Minister.
Willard P. Hutchinson, Train Despatcher, I.C.R., Truro, N.S. } Elected by the
W. Milledge Thompson, Conductor, I.C.R., Moncton, N.B. } Employees.

D. POTTINGER,

Chairman.

W. C. PAVER,

Secretary.

PART IV

Report of the Government Chief Engineer of the Western Division of the National Transcontinental Railway

MR. COLLINGWOOD SCHREIBER, C.M.G.

Office of the General Consulting Engineer to the Government and Chief Engineer of the Western Division of the National Transcontinental Railway.

OTTAWA, April 23, 1912.

The Honourable
Frank Cochrane,
Minister of Railways and Canals,
Ottawa, Ontario.

SIR,—I have the honour to present my annual report on the works of construction on the western division of the National Transcontinental Railway for the fiscal year ended March 31, 1912.

Inasmuch as you are not probably familiar with the history of this road, I may explain:—

The western division extends from the western limit of the Winnipeg terminals, on the east bank of the Assiniboine river to the city of Prince Rupert, the Pacific coast terminus, a distance of 1,747 miles. This for construction purposes is divided into two sections, viz.:—

The one designated 'The Prairie Section' extends from the western boundary of the Winnipeg terminals to the east bank of Wolf creek, a distance of 915 miles.

The other—'Mountain Section'—extends from the east bank of Wolf creek to the city of Prince Rupert, the Pacific coast terminus, a distance of 830 miles.

The statutes call for a through line of railway from the city of Moncton, New Brunswick, to the navigable waters of the Pacific ocean.

The western division was to be laid out, constructed and equipped to a standard not inferior to the main line of the Grand Trunk Railway between Montreal and Toronto, so far as may be practicable in the case of a newly constructed line of railway, but should not be obliged to construct a double track.

In aid of the construction of the 'Prairie Section' the government guaranteed bonds to the extent of 75 per cent of the cost of construction not to exceed $13,000 per mile, and of the 'Mountain Section' 75 per cent of the cost of construction.

GENERAL.

The grades and curves are much more favourable to the economical handling of the traffic than those on the section of the Grand Trunk Railway between Montreal and Toronto, a very important consideration. However, as regards the structural works, I was at issue with the Grand Trunk Pacific Railway Company. I contended that wherever the structures to be built are within 10 or 12 miles of a railway in operation they should be of a permanent character whereas, the Grand Trunk Pacific Railway Company contended it was an unreasonable interpretation of the 'standard,' and insisted that they should be composed of timber. To avoid delaying the work, an Order in Council was passed, leaving the matter to be settled by arbitration or otherwise upon certain conditions later on. So far as I am aware, no such settlement of the question has been made. This only applies to the 'Prairie Section' east of Saskatoon, and inasmuch as these timber structures are built, and as they will be good for several years to come, I would suggest that they be left undisturbed for the present.

PRAIRIE SECTION—915 MILES.

Whilst this section of road is not yet completed according to contract, it is so far advanced towards completion as to be safe for operation, and regular traffic trains have run successfully over this section throughout the entire year, and this has been a great boom to the travelling public, as well as to the settlers throughout the district traversed by the road.

No effort has been made by the Grand Trunk Pacific Railway Company to complete the work during the last fiscal year, as will be observed when I state that the work executed during the year was:—

2·45 miles of tracklaying.
117,500 cubic yards of ballasting.
44,920 cubic yards of grading in widening embankments to specification width.
10,263 rods of fencing.
58 Small way station buildings.
67 Latrines.
41 Tool houses.
11 Stock yards.
7 Loading platforms.
5 Wells.
28 Mail cranes.
1 Interlocking plant at crossing of Prince Albert branch of the Canadian Northern Railway.
1 Carpenter shop.
2 Ice houses.
1 Coal shed.

The question of the 'standard' as regards structures on this section, as I have stated above, has never been disposed of, but assuming the Company to have been correct in their view, viz:—that all structures should be of timber as built, excepting those over rivers, is accepted, and that the agreements entered into with the Canadian Northern Railway Company for the 6 miles of road immediately west of the Winnipeg Terminals, and the 7 miles of main line through the City of Edmonton are accepted by the Government and acceptance ratified by parliament, I estimate the cost to complete by the 1st of July, 1912, to be $2,650,000, of which sum $1,500,000 is for interest.

For the traffic and maintenance of the 'Prairie Section' the following mentioned conveniences have been provided:—

142 Stations or stopping places for trains.
114 Way station houses (combined passenger and freight).
5 Divisional Station houses (combined passenger and freight).
3 Freight houses.
132 Grain elevators.
35 Water services.
6 Round houses.
1 Car repair shop.
129 Tool houses.
18 Store houses.
114 Latrines.
98 Loading platforms.
44 Stock yards.
4 Coaling sheds.
3 Machine shops.

55 Section houses.
84 Bunk houses.
3 Blacksmith shops.
There are yet 4 coaling plants to be provided.

The bridges and other works of construction have been maintained at cost of construction.

The maximum grade against the east bound traffic is $\frac{4}{10}$ of one per cent, and against the westbound traffic $\frac{5}{10}$ of one per cent. The sharpest curve being 6° and the alignment is good.

'MOUNTAIN SECTION' 830 MILES.

The works of construction have not been very vigorously prosecuted during the year.

From Wolf creek westerly for a distance of 158 miles to the first crossing of the Fraser River, with the exception of the forming of solid embankments where temporary trestles or pile bridges have been erected, the work is practically completed, sufficiently so at any rate to enable the track to be laid over the whole of this distance. On the first 100 miles a first lift of ballast has been placed under the ties. The end of the track is at the 158th mile, and likely to be so until May or June next.

Several steel bridge superstructures remain yet to be erected, the concrete substructures of which are in course of being built. The only steel structures so far erected on the 158 miles are the bridges over Wolf creek, McLeod river and Athabaska river.

The following buildings have been erected:—
2 Divisional station houses.
15 Way station houses.
4 Water stations.
2 Coaling plants.
3 Bunk houses.
15 Latrines.
2 Round houses.
1 Machine shop.
1 Section house.
1 Car shop.
18 Tool houses.
1 Freight house.

From the 158th mile to the 180th mile—at Tete Jaune Cache—the grading is very heavy. The work is being rushed, with the view to so far completing the grading and bridging as to enable the track to be laid over it by June next; there are about 1,600 men employed on this section of the work.

West of this point, 180th mile to the 620th mile, the work of grading is merely being opened up, but considerable work has been done in clearing the right of way. From the 620th mile to the 645th mile, about 30 p.c. of the grading is done. From the 645th mile to the 668th mile (crossing of the Skeena River) the grading is practically completed, excepting the 2,000 foot tunnel, the heading of which is through, but about 1,200 feet benching yet remains to be done.

The piling for the wooden trestle bridges is well advanced, and the concrete pedestals for the steel trestles are completed.

From the 668th mile (crossing of the Skeena river) to the 732nd mile, the grading, tunnelling and timber bridges are completed and the track is laid and public

traffic is conducted thereon. The building of the substructure of the steel bridge over the Skeena river has been a much heavier undertaking than was anticipated would be the case. The two concrete abutments and three out of the five piers are completed. In building the two piers in the river, the pneumatic process had to be adopted, and this work is well advanced. The heavy ice has greatly impeded progress, but it is hoped these piers will both be completed early in April when the erection of the steel superstructure will be at once proceeded with.

From the 732nd mile westward to Prince Rupert—830th mile—the grading and tunnelling is completed, the track is laid, a first lift of ballast is put under the ties, and public traffic trains are operated thereon.

The superstructures of the steel bridges, excepting that over the Zanardi rapids, are not yet erected, but the concrete substructures will shortly be ready to receive them.

The following buildings have been erected:—

1 bunk house.
1 headquarters.
11 station houses.
1 messroom.
11 section houses.
1 office.
1 engine-house (2 stalls).
1 dwelling house.
2 warehouses.
14 tool houses.
1 workshop.
1 mechanical storehouse.
11 latrines.

The sidings are laid in at all stations and considerable siding accommodation has been provided in the terminal yard at Prince Rupert.

A two-wire telegraph line has been erected from the 731st mile to the 830th mile, and a large quantity of telegraph material is on hand to extend the line towards Wolf creek.

No less than 13 tunnels occur between the 619th mile and the 830th mile (Prince Rupert), their aggregate length being 8,886 feet. Many of the tunnels are driven through treacherous ground; these are temporarily lined with timber, but before the road can be accepted as completed, they will have to be lined with concrete or masonry.

GENERAL.

In so far as the work has advanced, I believe it to be substantial and well done. The structures over rivers are composed of concrete substructures and steel superstructures; the culverts and the pile and trestle bridges over small streams are of timber. The 10 wooden snow-sheds already built have an average length of 2,850 feet. The tunnel snow-shed through solid rock has a length of 1,400 feet.

The unsettled state of the labour market has greatly interfered with the progress of the work. However, men appear to be more plentiful at the present time, but they are restless, and will not settle down to work for any lengthened time.

EXPENDITURES.

The expenditure on 'Prairie section' up to March 31, 1912..	$34,507,334 29
The expenditure on the 'Mountain section' up to March 31, 1912..	33,689,315 76
Total..	$68,196,650 05

The expenditure on the 'Prairie section' appears to be less than it was. The reason is that certain rolling stock, the value of which was included in the previous year's expenditure, has been transferred from the 'Prairie' to the 'Mountain section.'

I have the honour to be, sir,
Your obedient servant,

COLLINGWOOD SCHREIBER,
Chief Engineer, Western Division N. T. Ry.

PART V

QUEBEC BRIDGE RECONSTRUCTION

REPORT OF CHAIRMAN OF BOARD OF ENGINEERS

BOARD OF ENGINEERS, QUEBEC BRIDGE,

MONTREAL, April 20, 1912.

SIR,—I beg to report progress of work on the reconstruction of the Quebec bridge for the fiscal year ending March 31, 1912, as follows:—

Masonry.—Considerable progress was made on the contract for masonry during the past year. The caissons for the north pier were sunk to their final position at elevation 20·0, or about 50 feet 0 inches below the level of the river and 81 feet 0 inches below extreme high water. Two courses of granite masonry were laid on the concrete foundations before winter set in and work closed down for the season. This pier will be finished during the coming summer.

The caisson for the south main pier was placed in position during the past summer and preparations are being made to sink it the coming season. A portion of the plant used for the sinking of the north main pier has been removed to the south side and additional plant added for the operations on this side of the river. All the old masonry has been demolished, the granite facing of which will be used in the new piers. While the work on the main piers is going on, work will also be started on the shore piers, the entire remaining work being thus carried on simultaneously during the whole season.

Removal of Debris.—All the work embraced in this contract was completed during the past summer and the steel removed entirely from the bridge site.

Removal of Old Unused Steel.—During the past winter a contract has been signed with Mr. R. W. Mayer, of St. John, for the removal of all unused steel originally intended for the old bridge. This steel is at present stored at Belair on the north shore, Chaudière junction on the south shore, as well as on the actual bridge site. It is the intention to start moving this steel early in the present season.

Superstructure.—During the past year the contract for the superstructure has been awarded to the St. Lawrence Bridge Company, of Montreal. During this time, this company has had a large staff at work making the necessary calculations and details of construction and erection. This work has progressed to such a stage that it is expected that during the present year a good start will be made on the actual fabrication of the bridge members. About 1,000 tons required for the anchorages is now being manufactured and will be erected in place within the next few months.

The new shops of the St. Lawrence Bridge Company, required for the handling and manufacture of the heavy members of the bridge, are now being erected at Rockfield, near the works of the Dominion Bridge Company, and it is expected that the plant will be in running order before the end of the year.

Tests.—During the past year, the St. Lawrence Bridge Company have made a considerable number of tests under the supervision of the Board of Engineers This work comprises tests on various details of construction as well as a number of typical tension and compression members that will enter into the design of the bridge. The results of these tests will furnish the Board with much useful information.

All of which is respectfully submitted.

C. N. MONSARRAT,
Chairman and Chief Engineer.

Honourable FRANK COCHRANE,
Minister of Railways and Canals,
Ottawa.

PART VI

REPORT OF THE CHIEF ENGINEER OF THE DEPARTMENT

AND

Reports of Canal Superintending Engineers and Superintendents and Chief Engineer, Hudson Bay Railway,

FOR THE YEAR 1911-12

Ernest Marceau, Superintending Engineer, Quebec Canals.

W. A. Stewart, Superintendent, Ontario-St. Lawrence Canals.

C. D. Sargent, Resident Engineer, Ontario-St. Lawrence Canals.

J. L. Weller, Superintending Engineer, Welland Canal.

J. W. LeBreton Ross, Superintending Engineer, Sault Ste. Marie Canal.

F. B. Fripp, Engineer-in-Charge, Sault Ste. Marie Canal.

A. T. Phillips, Superintending Engineer, Rideau Canal.

A. J. Grant, Superintending Engineer, Trent Canal.

J. H. McClellan, Superintendent, Trent Canal.

C. D. Sargent, Engineer-in-Charge, St. Peter's Canal.

J. Armstrong, Chief Engineer, Hudson Bay Railway.

OFFICE OF THE CHIEF ENGINEER.

OTTAWA, ONT., September 12, 1912.

SIR,—I have the honour to submit my annual report for the fiscal year ending 31st March, 1912.

Attached hereto will be found the annual reports of the Superintending Engineers of the several canals, the Resident Engineer of the Ontario-St. Lawrence canals, the Engineer in Charge of Improvements at Sault Ste. Marie, the Superintendents of the Ontario St. Lawrence and Trent canals, and the Chief Engineer of the Hudson Bay railway.

The report of the Chief Engineer of the Intercolonial railway and of the Prince Edward Island railway upon the expenditures upon these lines chargeable to Capital has been addressed to the Assistant Chairman of the Government Railways Managing Board, and will be found elsewhere in this volume. The circumstance that engineers in direct charge of works chargeable to Capital report to and receive instructions from the Managing Board renders effective control by the Chief Engineer of the Department of Railways and Canals impossible; and diminishes the value of the advice which he is called upon to give to the Department Head.

CANALS.

The through water route between Montreal, at the head of ocean navigation, and Fort William and Port Arthur, on the west shore of Lake Superior, comprises 74 miles of canal with 48 locks and 1,155 miles of river and lake waters, or a total of 1,229 miles, the minimum depth of water being 14 feet. From Montreal to Duluth, at the south west of Lake Superior, the total distance is 1,354 miles, and to Chicago 1,286 miles. A summary of this route will be found in Part VII. with details of the several works. At Port Arthur and at Fort William (about six miles apart), the Canadian Pacific railway gives connection westward and with the south at Fort William. A line of railway has been built from Fort William by the Grand Trunk Pacific railway to give communication with the Transcontinental railway and over that road from Winnipeg.

On this through route the approaches to the canals and the channels through the intermediate river reaches are well defined, and are lighted with gas buoys under the control of the Department of Marine and Fisheries, admitting of safe navigation in the hands of competent pilots, both by day and night. In the cases of the Sault Ste. Marie, the Welland, the Cornwall, the Soulanges and the Lachine canals, they are well lighted throughout with electricity and are electrically operated. The Farrans Point canal is lighted with acetylene gas.

Of the minor systems, the Murray, Trent, Rideau and Ottawa River canals may be considered geographically as branches from the through route. In operation, however, these canals serve a distinct traffic of a more local nature. Isolated from these above mentioned systems, the navigation of the Richelieu river and Lake Champlain is effected by the St. Ours lock and the Chambly canal; while, in the far east, the Bras d'Or lakes of Cape Breton are made accessible from the Atlantic by the St. Peter's canal.

Detailed information respecting the several canals is contained in an appendix.

The work executed during the past year has been almost wholly of the nature of improvements and repairs to existing works, the exception being in the case of the Trent canal where the construction of an extension of the present system to an outlet on Lake Ontario is in progress.

LACHINE CANAL.

On the Lachine canal the principal items of work have been the continuation of the rebuilding of the slope and vertical walls with concrete in the reach above Cote St. Paul lock, near Rockfield; improvements to upper entrance pier at Lachine; the widening of the canal and providing wharf accommodation at Cote St. Paul and St. Henri (completed in July, 1911); the completion of construction of a rolling lift bridge at Cote St. Paul over the entrance to the side timber basin belonging to the St. Paul Hydraulic and Land Company; the excavation for the foundation of a bascule bridge to be erected over the canal at the foot of Simplex street, St. Pierre aux Liens; and the paving of certain street, wharf and shed space together with the construction of some concrete walls in the St. Gabriel reach.

SOULANGES CANAL.

On the Soulanges canal the work of removing projections from the slopes and lining the latter with concrete was continued. A contract was also let for the construction of an extension of the guard pier into Lake St. Francis, which will facilitate the entry of the canal by vessels during stormy weather. The widening of the channel necessitated by these works is to be done by our dredging fleet and was partially completed last season, but no progress was made under the contract.

The construction of boulder protection for the clay shores of Lake St. Francis has been continued during the year; and the macadamizing of the Hungry Bay dyke road was completed.

CORNWALL CANAL.

On the Cornwall canal the work of improving the upper entrance to lock No. 17 was completed. This consisted of the construction of cribwork and concrete approach wall and the widening of the canal bottom by dredging. A great improvement to the approach of this lock for down-bound vessels has resulted.

The upper entrance to lock No. 19 was improved by the extension of the north approach wall.

WILLIAMSBURG CANALS.

A long entrance pier is being constructed below the Farrans Point lock, which will enable vessels to navigate the treacherous eddy at this point in safety while upbound.

At Morrisburg (Rapide Plat canal) the lower entrance of lock 24 is being improved by the straightening of the channel.

An approach wall is being constructed above lock 28 (Galops canal) which will greatly improve the entrance to this lock.

Some dredging was done in the Rapide Plat canal to restore canal grade by the removal of high spots.

MURRAY CANAL.

On the Murray canal, the dredging of certain high areas was carried on.

WELLAND CANAL.

The following improvements were completed during the year:—the widening of the canal near Welland, and the construction of a turning basin at Thorold. Messrs. Hogan & Macdonnell did not quite complete their contract, entered into in 1900, for improving the Port Colborne entrance.

The widening of the deep water channel along the west pier at Port Colborne, and an extension of the mooring dock west of the government elevator, were commenced.

PORT COLBORNE ELEVATOR.

The government elevator handled 7,000,000 bushels of grain, an increase of 4,000,000 bushels over the previous season; and its net earnings were over $20,000. Foundations for a two million bushel elevator were constructed when the present elevator was built, and the business now offering justifies the provision of the storage capacity as originally contemplated.

WELLAND SHIP CANAL.

The surveys for the new ship canal, which have been under way for some years, were completed.

SAULT STE. MARIE CANAL.

The rebuilding of the north pier at the upper entrance, which consisted of the removal of the old pier about 500 feet in length and the construction of a concrete pier of the same length, and which was commenced in 1909, was completed.

The extension of the north pier, 300 feet westerly to the north entrance pier, was commenced, and about 42 per cent of the work was done.

About 400 feet of the timber top of the lower north pier was rebuilt, and during the coming season the remaining 700 feet will be undertaken. This work is being executed under 'Repairs' vote.

The traffic statistics of both the Canadian and American canals show a decrease over last year. The freight tonnage through the Canadian canal amounted to 30,953,455 tons, a decrease of 15 per cent; passengers numbered 38,566, an increase of 14·75 per cent; and the registered tonnage totalled 19,331,966 tons, a decrease of 17 per cent.

RIDEAU CANAL.

Through navigation was not maintained throughout the whole season once more on this canal, due to the spring freshet being so light that Rideau lake (the main source of water supply for the canal from Smith's Falls to Ottawa) did not fill up to within seven or eight inches of its normal spring height; and the reservoirs at Bobs lake and Wolfe lake did not fill up to normal height. The heavier draught boats could only ply between Ottawa and Smith's Falls, on the eastern end, and between Kingston and Oliver's Ferry, on the western end, at the close of September.

The Superintending Engineer made an examination of the lakes tributary to Rideau lake with a view of conserving their waters by means of dams at their outlets so as to feed Rideau lakes in low water, but his conclusion is that the quantity of water that could be stored by this means would not raise the water of Rideau lake more than about two inches and would be quite out of proportion to the cost of carrying this scheme into effect.

Under agreement with the Department, the City of Ottawa is constructing a high level concrete bridge over the canal at Bank street, Ottawa, thus rendering unnecessary the swing bridge formerly maintained at this point.

TRENT CANAL.

On the Trent canal, upon which new construction is in progress, the extent under operation remains the same as in the previous year, namely 160 miles, extending from Lake Simcoe to Healey Falls, a point sixteen miles below the village of Hastings. The water was satisfactorily maintained at a uniform height throughout the year.

A considerable amount of repairs and improvements were executed upon the completed portion of the canal. Some dredging has been done between Lakefield and Young's Point and in the Scugog river; also in Sturgeon lake and at the Kirkfield lift-lock. A number of new wharfs were built, and a concrete dock is under construction at Peterborough.

An electric lighting system was installed at the Peterborough hydraulic lift-lock, which enables boats to be locked through at night.

The construction of the new dam at Burleigh Falls is 83 per cent completed, and should be finished during the coming summer.

The new canal across the narrow peninsula between Cameron and Balsam lakes at Rosedale has been in commission since 1910. There still remains some dredging in the Gull river to be done by the contractor, which will probably be completed by midsummer.

The work of water conservation through the dams on the various tributary streams acquired from the Ontario government has been considerable. Concrete dams were built at Twelve-mile lake and White lake; and new timber dams were erected at Trout lake and Squaw river.

ONTARIO-RICE LAKE DIVISION.

The construction of the Ontario-Rice Lake division is dealt with in an interesting and comprehensive report of the Superintending Engineer, which will be found in the appendices hereto.

This division, which extends from Trenton, on Lake Ontario, to Rice lake, is 56½ miles in length and is divided for construction purposes into seven sections, all of which are under contract. It follows the River Trent and will comprise 9½ miles of canal, 13 miles of subaqueous channel, and 34 miles of deep river. The total rise between low water level on Lake Ontario and normal navigation level on Rice lake is 369 feet, to be overcome by 18 locks. The river and canal levels will be controlled by 14 dams, and 18 bridges are required, all of which, except one, will be swing or bascule spans. Up to end of fiscal year, 10 locks, 7 dams, and 11 bridges have been built. The locks are concrete, with 8 feet 4 inches of water on the sills; they are 175 feet long between the hollow quoins and 33 feet wide, accommodating barges of 1,000 tons, about 150 feet long and 30 feet beam, drawing 8 feet of water. The work involved requires the removal of about 1,500,000 cubic yards of earth, 1,250,000 cubic yards of rock, loose and solid, and the building of about 400,000 cubic yards of concrete. The approximate is set down at $6,750,000, of which the estimated value of the seven contracts for the seven sections totals $5,100,000 on which there has been expended for work done and material delivered up to March 31, 1912, the sum of $2,869,753.30, or about 57 per cent of the estimated value at contract rates of the seven contracts. Details of the work done will be found in the above mentioned report of the Superintending Engineer.

HOLLAND RIVER DIVISION.

The government decided to abandon further work on this division, and accepted a surrender of the York Construction Company's contract on December 31, 1911. A special agreement was entered into with the York Construction Company for the execution of certain unavoidable work required before operations could be finally abandoned, and this work will be completed early in the coming summer.

LAKE SIMCOE-GEORGIAN BAY DIVISION.

A thorough survey of the Severn river is under way with a view to preparing plans and specifications for canalizing the river to the same dimensions as the Ontario-Rice Lake division.

HYDROGRAPHIC SURVEYS.

Surveys are being carried on intermittently with the object of making a complete and reliable set of charts of the chain of lakes which form part of the Trent navigation. So far, very little of the field work has been plotted.

ST. PETER'S CANAL.

A contract was let for the construction of a new lock, 300 feet long and 48 feet wide, and a new entrance at the Atlantic end. Only preliminary organization had been done at the end of the fiscal year. The existing entrance will be used during the new construction and there will be no interference with navigation. Mr. Sargent's report contains an interesting resumé of the history and utility of this canal.

HUDSON BAY RAILWAY.

The construction of this railway was further advanced by the letting of a contract to Mr. J. D. McArthur, in August, 1911, for the first section of 185 miles from The Pas to Thicket Portage. The contractor has made a start at clearing and grading; more particularly on the first 70 miles.

Plans and profiles are in preparation for the purpose of calling tenders for the construction of a second section of about 65 miles from Thicket Portage to Split Lake junction.

The contract for the substructure of the bridge over the Saskatchewan river at The Pas has been completed. The fabrication of the superstructure has proceeded very slowly, and it is unlikely that the erection will be completed before the fall of 1912. The bridge will consist of four fixed spans of 147 feet in length, and a swing span of 262 feet in length, with roadways for highway traffic bracketted out from either side.

The report of the Chief Engineer deals at length with preliminary location surveys, for lines to Port Nelson and Port Churchill, and, as the location stands at present, the actual distance from The Pas to Port Nelson is 418 miles and to Fort Churchill via the east side of Split lake 498 miles. Chief Engineer Armstrong states that terminal room can be had at Port Nelson for all the railroads in Canada, while at Fort Churchill the room for terminals convenient to possible dock sites is not satisfactory. He presents some interesting figures showing that the cost of operation would be less if the Nelson route be adopted.

DARTMOUTH BRANCH LINE.

Surveys were made for a branch line of railway from Dartmouth, in the county of Halifax, via Musquodoboit harbour and the valley of the Musquodoboit to Deans, in the same county, a distance of 73 miles, and the contract for construction was awarded to Messrs. M. P. & J. T. Davis. Very little work had been done up to the end of the fiscal year.

GUYSBOROUGH TO COUNTRY HARBOUR TERMINAL.

Surveys were made for a line of railway from Guysborough to Sunny Brae through Country Harbour Crossroads to deep water of Country Harbour. The construction of this line has not been proceeded with.

NORTHUMBERLAND STRAITS CAR FERRY.

Professor A. K. Kirkpatrick, C.E., of Queen's University, was engaged in February, 1912, to undertake a study of the Northumberland straits and means of access thereto on either side in regard to the establishment of the most suitable route for a car ferry between Prince Edward Island and the mainland.

In addition to the supervision of the works of construction and operation, numerous investigations of a technical nature have engaged the attention of the members of this branch. These investigations arise from damage claims, the submis-

sion of plans affecting property or interests of this department, applications for leases, and railway inspections for subsidy and guarantee bond purposes, &c.

I have the honour to be, sir,

Your obedient servant,

W. A. BOWDEN,
Chief Engineer.

A. W. CAMPBELL, Esq.,
Deputy Minister,
Department of Railways and Canals,
Ottawa.

QUEBEC CANALS.

SUPERINTENDING ENGINEER'S OFFICE, QUEBEC CANALS.
MONTREAL, May 23, 1912.

W. A. BOWDEN, Esq.,
Chief Engineer Railways & Canals,
Ottawa.

SIR,—I beg to hand you herewith my Annual Report upon the works under my charge for the fiscal year expired on the 31st March, 1912.

The Canals of the Province of Quebec comprise the Lachine and Soulanges Canals on the St. Lawrence route, the Ste. Anne, Carillon & Grenville Canals on the Ottawa route and the St. Ours and Chamblay Canals on the Richelieu river.

During the last season, navigation has been carried on without a single interruption on all of the canals in my division. Traffic increased considerably on the Lachine and Soulanges Canals and was also very brisk on the Richelieu River canals.

CANAL STORES.

The position of Inspector of Canal stores in this division, rendered vacant by the death of the late Mr. P. B. Benoit, which occurred on November 10th 1910, was filled on the 13th of January last, by the appointment of Mr. P. A. Jodoin, who had occupied the position of Superintendent of the Chambly canal since 1905. Mr. J. E. Robitaille was appointed to succeed Mr. Jodoin.

LACHINE CANAL.

Length 8½ miles; total rise 45 feet. This canal is provided with a duplicate set of five locks. The old ones 200 x 45 with 9 ft. of water on the sills and the new ones 270 x 45 ft. with 14 ft. of water on the sills.

Owing to the numerous factories on the lower section of this canal, it was, some years ago, found necessary to rebuild old locks Nos. 1 & 2, of the same dimensions as those termed new locks, viz:—270′ x 45′ x 14. There are therefore ample facilities for the larger type of vessels using the canals to handle the traffic in the reaches between the Harbour and lock No. 3. The smaller locks are principally used by market boats.

REPAIRS AND RENEWALS.

The principal items of work performed under the above head during the year were as follows:—

All the seven swing and nine stationary bridges on the canal were cleaned by the sand blast process and painted, the work being done in a very satisfactory manner by the Canadian Sand Blast Company.

Ninety five cast iron mooring posts were placed at various points along the line superseding wooden posts.

The Little River St. Pierre, from Rockfield to its outlet opposite the city water works, was cleaned on three different occasions during the Spring and Summer.

The top of the wooden pier below old lock No. 4, Cote St. Paul, was taken down to the water line and rebuilt with concrete, the total length of wall contructed being 400 ft.

Concrete sidewalks were laid as follows:—

At the south end of Brewster's bridge, 75 feet long by 5 feet wide.

East of the Cote St. Paul power house, 100 feet long by 5 feet wide.

At the south end of the Lachine swing bridge, 150 feet long by 5 feet wide.

Permanent iron fences with posts set in concrete were erected at the following places:—at the Mill streets shops along Riverside street; at the south end of Wellington bridge; around the head race of regulating weir No. 3 (St. Gabriel); around the tail race of regulating weir No. 4 (Cote St. Paul) and around the old and new supply weirs at Lachine.

The following accidents occurred during the year:—On the 26th July, 1911, the propeller "Simla", owned by the Calvin Company, ran into Cote St. Paul swing bridge throwing it off its pivot and causing serious damage to the underwork. The cost of the repairs was paid by the owners. Navigation was not interrupted.

On the 15th July, 1911, the steamer *Glengarry* sank in Wellington Basin. The water had to be lowered in the reach on the following Sunday, in order to float the vessel.

Forty extra life preservers with ropes and poles were placed at various points along the canal and seventy-five additional safety ladders built into the canal walls.

CAPITAL.

Vertical concrete walls.—This work was continued by the contractors, Messrs Haney, Quinlan & Robertson, and consisted largely of laying concrete under water on the north and south slopes of the canal, near Rockfield, and on both sides of the south pier in the upper entrance. The main portion of the latter was completed (about 2,500 feet) and some 500 feet of the top covering also laid as well as the steel covering to protect the ice breaker.

This work will be entirely completed during the season of 1912.

Widening and wharf accommodation at St. Henri and Cote St. Paul.—This work was completed by the Canadian General Development Company, in July last. The final estimate of it will be forwarded to you in a few days.

The Scherzer roller lift bridge over the entrance to the side timber basin belonging to the St. Paul Hydraulic and Land Company, at Cote St. Paul, was also completed and tested. It is working satisfactorily.

Bridge at Rockfield.—This bridge is to be erected at the foot of Simplex street, St. Pierre aux Liens. The contract for the substructure was awarded to Messrs. Haney, Quinlan & Robertson last fall. The excavation only had been done at the end of last season; the concrete work will be completed early this year.

A Strauss bascule bridge has been adopted here, the contract for which has been awarded to the Dominion Bridge Company.

INCOME.

Concrete walls, St. Gabriel reach, paving, &c.—This work was executed under contract by Messrs. Haney, Quinlan & Robertson and satisfactorily completed during last year.

The paving of Oak and Riverside streets, of the space between St. Gabriel sheds Nos. 1 and 2 and of the shed on the north side of basin No. 1, foot of McGill street, is a decided improvement and greatly facilitates the heavy traffic at those points.

DREDGING.

The dredging fleet came out of winter quarters on May 1, 1911, and from that date to June 1, was engaged doing some cleaning first in the Lachine canal, then in front of the wharf at the foot of the Beauharnois canal.

On June 1, the dredging in connection with the protection works at the head of the Soulanges canal upper entrance was commenced and kept up until July 19 following, when the dredge was sent down to the reach in the Soulanges canal between locks No. 3 and 4, where a good deal of work was done in trimming the south slope for concrete lining. On August 8, work was resumed at the head of the Soulanges canal and, on October 10, the fleet left for the Lachine canal. From the 12th of that month to November 24, when it went into winter quarters, it was engaged cleaning at several points in the canal.

REPAIRS TO VESSELS.

The dredging fleet consists of the tug *Frank Perew,* one steam dredge, one steam derrick, two dump scows, thirteen scows and a floating storehouse. Most of these vessels had to undergo pretty extensive repairs last winter. The hulls of the dredge and derricks, which are pretty old, were completely overhauled and many parts of the machinery in them were removed or altered. At the opening of the season the whole fleet was in a good state of efficiency.

SOULANGES CANAL.

Length, 14 miles; 5 locks 270 x 45 feet; 15 feet of water on the sills.

REPAIRS AND RENEWALS.

Locks.—The stoney sluices of locks Nos. 2 and 3 were taken out of the pits during the winter, the tracks and rollers, which were considerably worn out, were renewed. The sluices of the other locks will also have to be overhauled next year.

All the lock and bridge houses were painted during last summer.

Cast-iron mooring posts.—A number of the mooring posts along the long reach between locks Nos. 4 and 5, which had been lifted out of place by vessels' lines, were dug out and the concrete blocks in which they are set up reinforced.

Fences.—The renewing of the canal fences which was commenced in 1910-11, was continued last year. A section 3 miles in length, on the south side, was thus renewed and a considerable length of the fence on the north side temporarily repaired.

Shops.—Besides the usual work done here for the Soulanges canal, the machine shop was busy in March last, turning out machinery for the electric operation of the St. Ours lock gates and sluices.

Regulating basin No. 2.—A dangerous leak in the north bank of this basin had been giving a good deal of trouble for a couple of years. During last summer, a temporary dam was built at the entrance and the water taken out. Then a trench 10 feet deep and about 75 feet long, was cut at the foot of the slope down to the solid

rock and a concrete wall built so as to cut off the leak. The water was readmitted into the basin at the end of March last, and at the time of writing no further leak has been noticed.

CAPITAL.

Protection of work at upper entrance.—On October 26, 1911, a contract was signed by Messrs. Haney, Quinlan & Robertson for the construction of an extension, 1,200 feet in length, into Lake St. Francis, of the guard pier here and a breakwater, 600 feet in length, some distance above the end of this extension.

The widening of the channel necessitated by these works is to be done by our dredging fleet. From June 1 to the middle of October last, dredge No. 2 was engaged here, with occasional interruptions, the dredge being called away several times for emergency work. The material removed from the channel during the season amounted to 8,000 cubic yards.

Up to the end of the season the contractors had not begun operations on the pier and breakwater.

Stopping leaks and trimming slopes.—This work, which consists of removing projections from the slopes and lining the latter with concrete, was continued through last summer by Messrs. Haney, Quinlan & Robertson, under their contract, dated December 12, 1908. A section 5,525 feet in length was done from the middle of May to the month of October last. The total quantity of concrete laid was 17,125 cubic yards.

New machinery.—The steel gate lifting scow was provided with a centrifugal pump driven by a 10 horse-power electric motor, and a small power lathe and a few working tools have been added to the equipment of the shops at Cascade point.

Shelter for linemen.—A small building, similar to those erected on the locks, was built at a point half way between locks Nos. 4 and 5 for the use of the patrolmen and linemen, together with a shed for the sheltering of their horses.

Mooring posts.—Thirteen cast-iron mooring posts, set in concrete, were laid on the north bank of the canal above and below the St. Emmanuel and River Rouge bridges.

Wharf at power-house.—The old wooden wharf at the power-house, which had to be removed to permit the lining of the canal slope at that point, was replaced by a concrete structure 50 feet long by a width of 24 feet on top and 10 feet high on the canal side. Boats drawing 8 feet of water can be moored at that wharf.

STE. ANNE'S LOCK.

Length, ½ mile; one lock 200 x 45 feet, 9 feet of water on the sills. Old lock still available, 200 x 45 feet, with 6 feet of water on the sills. Total rise, 3 feet.

REPAIRS.

No work of importance was performed here during the year, except the rebuilding of the abutments of a bridge over a slip across the north bank of the lower entrance and of the eastern end of the wall on the north side of that entrance. The new structure which is of concrete is about 50 feet long and 10 feet high.

CARILLON AND GRENVILLE CANALS.

Carillon canal.—Length, ¾ mile; two locks 200 x 45 feet, with 9 feet of water on the sills; total rise, 16 feet.

Grenville canal.—Length, 5¾ miles; five locks, 200 x 45 feet, with 9 feet of water on the sills; total rise, 43¾ feet.

REPAIRS AND RENEWALS.

Besides keeping the structures in good repair little was done here under the above head during the last fiscal year. The principal items of work performed were as follows:—Rebuilding three pairs of lock gates, rebuilding one scow and filling in front of waste weir No. 5.

ST. OURS LOCK.

Length ⅛ mile; one lock 200 x 45, 7 feet of water on the sills; rise 5 feet.

The Overseer of this lock, Mr. O. Laventure, was recently replaced by Mr. Alfred Coderre.

REPAIRS AND RENEWALS.

Under this head there is nothing to record except the maintaining of the structures in good repair.

INCOME.

Electrical equipment.—Electrical machinery for the operation of the lock gates and sluices was designed during the year. It was expected that the whole would be in working order for the opening of navigation, but owing to the difficulty in procuring the appliances required and especially in having them delivered by the railway companies, the work will not be completed before the middle of June next.

Movable dam.—During last Summer, steel frames and timber stop logs were placed on the crest of the dam here, in such a manner that both can be removed at will. Their purpose is to keep the level of the section of the Richelieu river between St. Ours and the foot of the Chambly canal about two feet above low-water mark.

The experience of last season was entirely satisfactory, the level of the river was kept up as intended during the period of low water and, in a couple of days at the end of November, a few men removed both stop logs and steel frames without any difficulty.

While this movable dam was being erected a concrete fish ladder was built into the dam in accordance with plans furnished by the Department of Marine & Fisheries.

Boom piers.—Four of the old cribwork boom piers on the east side of the lower entrance were removed and rebuilt with concrete laid on pile foundations. Although not completed they were brought to a height sufficient to hold the booms safely during the season of navigation this year and will be completed next Fall.

CHAMBLY CANAL.

Length 12 miles; 9 locks 118 x 22½ feet, 6 feet of water on the sills; total rise 74 feet.

As stated above, Mr. J. E. Robitaille has been lately appointed superintendent of this canal in place of Mr. P. A. Jodoin, transferred to the Canal stores inspectorship.

REPAIRS AND RENEWALS.

The chief items of work performed under this head during the year, were the renewal of the bottom of lock No. 6 the old planking was removed and replaced with concrete; the rebuilding of the abutment of the bridge above lock No. 2, the replacing of a number of old timber culverts on the road along the west side of the canal by vitrified clay pipes of suitable dimensions, the building of a shed 100′ x 20′ for the storing of canal appliances, such as derricks, road roller, heavy timber &c.

INCOME.

Under the head of Income, I have to report the rebuilding of the house of the keeper of bridge No. 3 and the taking down and reconstructing of the approaches of bridges No. 2 & 5; stone masonry was here substituted for the old timber approaches.

The remodelling of the canal lighting system and its extension from lock No. 2 to St. Johns, for which an appropriation had been provided at the Session of 1910-11, has engaged my attention during the last year. It had been expected that the work would be completed before the end of the last fiscal year but owing to serious delays on the part of manufacturers of electrical apparatus, the new system is not yet in working order at the time of writing. Under the advice of Mr. John Murphy, Electrical Engineer for the Department, it has been decided to adopt incandescent lamps instead of arc lamps as generally used on canals.

The electric station is now completed except for the installation of the switchboard which has not yet been received.

The power used here is supplied free of charge by the Montreal Light, Heat & Power Company, from their Chambly plant. This requires some explanation.

In the Spring of 1908, the Chambly Canal power house was carried away during the spring floods. The unprecedented rise of the Richelieu river at that point that year and consequently the destroying of the canal power house, were due to the existence of the Montreal Light, Heat & Power Company's dam some distance below.

After negotiations which occupied several months I succeeded in securing from the company the payment of $1,000 in cash, a transformer and 75 H.P. motor and the undertaking to supply in perpetuity to the Chambly Canal, for the loss of its power house, electrical energy equal to 75 h.p.

Under a subsequent agreement, dated the 9th of April 1912, power is to be supplied at the rate of 100 h.p. during the season of navigation and 40 h.p. during the winter months.

This power, it is expected, will be sufficient for the lighting of the canal from one end to the other. If necessary, however, a turbine can be installed in the new station completed last year, provision having been made for the purpose.

Wharf at St. Johns.—The old cribwork facing the St. Johns wharf was removed from a point opposite St. George street to the south end of the new wharf, a distance of 247 feet, and rebuilt in concrete. The work was done by day's labour. The filling behind the concrete wall was done with material dredged out of the canal entrance by the Chambly canal dredge.

Road along the west side of the canal.—An additional section of this road, 10,470 feet in length, was macadamized during the summer and fall of 1911. The metal for the road was supplied, under contract, by Mr. David Brault and Mr. Narcise Lord and the spreading and rolling of it, was done by day's labour under the supervision of the Superintendent and Engineer in charge of the canal.

New tugs.—Two new tugs, one of which is intended for the handling of vessels at lock No. 2, Lachine canal, and the other for service in connection with the dredging fleet, were designed during the year. The building of the hulls, &c., was begun late in January last and a contract for the boilers, engines, &c., awarded to the Doty Engine Company, of Goderich, Ont. The hulls were completed about April 1 last, but owing to the failure of the Doty Company in delivering the machinery in the time specified, the vessels could not be completed before the opening of navigation.

Hungry Bay dyke road.—The macadamizing of this road was completed early last fall, Mr. A. Cossette supplying, under contract, the crushed stone required, and the preparing of the roadbed, laying, watering and rolling of the metal being done by day's labour. At the time of writing, the whole length of the Hungry Bay dyke road, from Knight's Point to the division line of the counties of Beauharnois and Huntingdon, is in first class condition.

Lake St. Francis, protection of shores.—The work undertaken some years ago for the protection of both shores of Lake St. Francis against erosion was continued during the last fiscal year. On the south side of the lake, a new section of dry stone wall, 2,927 feet in length, was built during the winter months and a similar wall, 2,422 feet long, was added to the work done in previous years, on the north shore.

Surveys and inspection.—The survey of the Soulanges canal reserve lands, undertaken three years ago, was completed last fall. The plotting of the work is now pretty well advanced.

BEAUHARNOIS CANAL.

Bridge across the Lost Channel.—This bridge is located near the town of St. Timothy and was built by the department about fifteen years ago. The whole of the flooring was renewed last year and the steel chords, &c., painted. The iron pipe fences at each end were also reset and painted.

The works under the head of capital and income on the Lachine canal, are under the immediate supervision of Lt.-Col. H. R. Lordly, C.E., and Mr. L. S. Pariseau, C.E., is in charge of the same class of work on the other canals in this division.

I have pleasure in stating that both of them have discharged the duties entrusted to them during the year in a manner creditable to themselves and very satisfactory to me.

I have the honour to be, sir,

Your obedient servant,

ERNEST MARCEAU,
Supt. Engr. Quebec Canals.

LACHINE CANAL.

STATEMENT showing the depth of the river water on the mitre sills of new Lock No. 1 at lower entrance and new Lock No. 5 at upper entrance during the fiscal year ending March 31, 1912.

Months.	New Lock No. 1, Lower Sill.				New Lock No. 5, Upper Sill			
	Highest.		Lowest.		Highest.		Lowest.	
1911.	ft.	in.	ft.	in.	ft.	in.	ft.	in.
April	34	8	18	1	18	0	14	9
May	20	3	17	7	18	3	17	4
June	18	8	16	6	17	6	15	11
July	16	4	14	4	15	11	14	11
August	14	4	13	9	14	10	14	5
September	14	4	13	0	14	5	14	2
October	13	0	12	2	14	2	14	0
November	13	5	12	0	14	8	14	0
December	15	4	13	4	15	4	14	2
1912.								
January	33	0	15	0	15	9	14	9
February	28	8	23	8	15	4	13	3
March	25	10	23	0	14	9	13	7

SOULANGES CANAL.

STATEMENT showing the depth of the river water on the mitre sill of Lock No. 1 at lower entrance and Lock No. 5 at upper entrance during the fiscal year ending March 31, 1912.

Months.	Lock No. 1, Lower Sill.				Lock No. 5, Upper Sill.			
	Highest.		Lowest.		Highest.		Lowest.	
1911.	ft.	in.	ft.	in.	ft.	in.	ft.	in.
April	23	4	18	5	17	4	16	6
May	19	9	18	9	16	8	16	3
June	18	8	18	0	16	5	16	1
July	17	9	16	9	16	4	16	1
August	16	9	16	2	16	0	15	8
September	16	2	15	8	15	9	15	6
October	16	0	15	8	15	8	15	5
November	16	4	16	1	15	8	15	5
December	17	1	16	4	16	2	15	6
1912.								
January	19	2	17	1	16	7	15	7
February	24	5	18	3	16	2	15	2
March	24	3	20	3	16	0	15	4

SESSIONAL PAPER No. 20

CHAMBLY CANAL.

STATEMENT showing the depth of the river water on the mitre sills of Lock No. 9 at lower entrance and Lock No. 1 at upper entrance during the fiscal year ending March 31, 1912.

Months.	Lock No. 9, Lower Sill.				Lock No. 1, Upper Sill.			
	Highest.		Lowest.		Highest.		Lowest.	
1911.	ft.	in.	ft.	in.	ft.	in.	ft.	in.
April	20	11	12	5	11	7	8	11
May	17	2	12	8	11	10	9	9
June	12	9	10	3	9	10	8	5
July	10	6	8	6	7	8	8	6
August	8	7	7	6	7	11	6	11
September	9	5	7	5	7	11	6	9
October	9	8	7	5	8	1	6	7
November	10	6	9	5	9	1	7	1
December	12	10	9	1	9	11	7	10
1912.								
January	12	2	10	0	9	2	8	4
February	10	9	9	2	8	7	8	2
March	12	9	9	5	9	3	8	4

ST. OURS LOCK.

STATEMENT showing the depth of the river water on the mitre sills of the St. Ours Lock during the fiscal year ending March 31, 1912.

Months.	Lock No. 1, Lower Sill.				Lock No. 1, Upper Sill.			
	Highest.		Lowest.		Highest.		Lowest.	
1911.	ft	in.	ft.	in.	ft.	in.	ft.	in.
April	21	1	10	4	17	0	9	10
May	15	7	12	1	13	7	10	9
June	12	2	9	1	10	9	9	1
July	9	2	7	2	9	2	8	2
August	7	6	6	5	8	2	7	7
September	6	4	5	8	9	2	7	4
October	5	11	5	2	9	10	9	1
November	6	9	5	0	11	0	9	7
December	9	11	6	7	10	2	8	3
1912.								
January	12	4	9	7	9	6	8	9
February	11	9	10	9	8	9	8	0
March	12	4	10	10	9	8	8	3

CARILLON CANAL.

STATEMENT showing the depth of the river water on the mitre sills of Lock No. 1 at lower entrance and Lock No. 2 at upper entrance during the fiscal year ending March 31, 1912.

Months.	Lock No. 1, Lower Sill.				Lock No. 2, Upper Sill.			
	Highest.		Lowest.		Highest.		Lowest.	
1911.	ft.	in.	ft.	in.	ft.	in.	ft.	in.
April	17	3	11	10	15	10	10	11
May	18	8	16	3	18	8	16	3
June	17	1	14	6	17	3	14	3
July	14	6	12	1	14	2	11	5
August	12	4	11	6	11	11	10	9
September	11	7	11	0	10	10	10	4
October	11	0	10	8	10	4	9	10
November	12	1	10	9	11	7	10	1
December	13	6	12	2	15	0	11	2
1912.								
January	14	6	13	1	20	9	11	10
February	14	1	12	10	15	2	11	3
March	13	9	12	7	12	6	10	8

GRENVILLE CANAL.

STATEMENT showing the depth of the river water on the mitre sills of Lock No. 3 at lower entrance and Lock No. 7 at upper entrance during the fiscal year ending March 31, 1912.

Months.	Lock No. 3, Lower Sill.				Lock No. 7, Upper Sill.			
	Highest.		Lowest.		Highest.		Lowest.	
1911.	ft.	in.	ft.	in.	ft.	in.	ft.	in.
April	20	6	17	1	16	6	10	2
May	23	5	20	2	20	3	17	6
June	21	8	17	5	18	6	15	0
July	17	6	13	11	14	10	11	3
August	14	4	13	3	11	11	10	7
September	13	2	12	6	10	7	9	7
October	12	6	12	3	9	7	9	2
November	14	0	12	6	11	8	9	6
December	17	0	13	10	13	3	11	2
1912.								
January	23	6	17	11	12	10	11	0
February	24	7	22	7	10	10	10	3
March	26	4	15	11	10	4	9	11

SESSIONAL PAPER No. 20

ST. ANNE'S LOCK.

STATEMENT showing the depth of the river water on the mitre sills of St. Anne's Lock at the lower and upper entrances during the fiscal year ending 31 March, 1912.

Months.	Lock No. 1, Lower Sill.				Lock No. 1, Upper Sill.			
	Highest.		Lowest.		Highest.		Lowest.	
1911.	ft.	in.	ft.	in.	ft.	in.	ft.	in.
April	13	8	10	7	15	11	10	10
May	13	9	12	4	16	8	14	7
June	12	8	11	4	15	5	12	2
July	11	3	10	0	13	0	10	10
August	10	0	9	6	11	3	10	5
September	9	6	9	1	10	5	9	11
October	9	4	8	11	9	10	9	7
November	9	8	8	10	10	11	9	9
December	11	0	9	3	12	6	10	11
1912.								
January	11	6	10	4	12	4	11	2
February	10	11	9	8	12	0	11	0
March	10	10	9	10	12	0	11	0

STATEMENT showing the dates of closing and opening of the Quebec Canals for season 1911–12.

——	Opening.	Closing.
Lachine Canal	May 1, 1911.	December 3, 1911.
Soulanges Canal	" 1 "	" 3 "
Chambly Canal	" 1 "	November 30, 1911.
St. Ours Lock	April 26, 1911.	" 30 "
C. & G. Canals	May 1, 1911.	" 30 "
Ste. Anne's Lock	April 28, 1911.	" 30 "

April 1, 1912.

SIR,—I have the honour to submit herewith the annual report on the maintenance and operation of the Ontario-St. Lawrence canals for the year ending March 31, 1912.

THE CORNWALL CANAL

was opened for navigation May 1 and closed December 6, and was operated throughout the season without serious damage and without prolonged delay to navigation.

The upper gates at lock No. 18 were wrecked by a steamer on May 10, but there are spare gates on hand and a pair was stepped, and navigation resumed within 10 hours. This was the most serious accident, and the longest delay to navigation during the season.

The water was let out of the lower reaches of the canal on April 3, but the ice was still heavy and this made repair work difficult. A particular instance of thick ice was at lock No. 17 weir where it had to be cleared away before the work of concreting could begin. A portion of the apron had been undermined and had raised last year, when temporary repairs were made. The work of laying a completed concrete floor was done while the water was out of the canal.

The gates in the lower end of old lock No. 17 were broken up, the loose mitre sill taken up, and the decayed portions of the bottom of the lock within the space of the gate recesses taken out, and both floor and mitre sill re-made in concrete, as also was the mitre sill apron. Then, after the water came into the canal again a new pair of gates was stepped. A cut-off wall of concrete was built across the lower end of this lock, and an open culvert about 320 feet long to carry the waste water through to the upper end of the next lock, all while the water was out of the canal. Later in the season a retaining wall was built along the southern side of the basin between old locks No. 17 and No. 16 at a distance of 55 feet from the centre line, and back-filled with earth; and then concrete ship's ways were built on the berme thus formed, to be used for repairing lock gates, scows, &c. Ways were also put in the bottom level for the use of deeper draught vessels. A similar wall was begun on the northern side at an equal distance from the centre line but the end of the season came before it was finished. It is intended to complete this wall and the backfill during the coming season. When this work is completed the repairing basin will have a total area of fully 200 feet by 320 feet, and will be capable of accommodating any vessel (light) that navigates the river.

An additional waste-weir was built at lock No. 17, and the displaced stones on the breast wall of the first weir were replaced, and concrete added to bring the breast wall up to normal water level for that reach of canal. In order to facilitate unwatering to the bottom of the valves at this weir in future years, a permanent dam, three feet high, was put in at the head of the raceway.

The concrete culverts at Clowe's creek, Robertson's creek and Mille Roches creek, provided for by a special vote, were built during the time the water was out of the canal; and the pipe railing put on these, and on Sand bridge, later in the season. Then the four culverts were formally handed over to the municipality of the township of Cornwall for future maintenance.

The spongy bank on the south side of the canal in the immediate vicinity of Robertson's culvert was reinforced with an earth-fill about 500 feet in length to a width on top of about 55 feet; and the culvert itself extended towards the south end to provide for the increased width of bank.

All the usual ordinary repairs to lock-gates, riprap, back ditches, &c., were done.

Spare gates for locks No. 19 and No. 20 were rebuilt and were stepped in the upper end of each lock. This completes furnishing the new locks with the improved hanging gear on the plates. The gates taken out were rebuilt for spares.

Seven new automatic emergency gates for the bye-pass at the guard-gates have been built and are ready to be placed in position during the early part of the coming season. They are made of oak timbers reinforced with steel I beams.

The Cornwall bridge was struck by a tug, and considerable damage done, though the bridge was not out of commission for more than two hours. The repairs were made by the canal staff.

The two-story addition to the office provides much-needed room for the work. A new coal storehouse was built of reinforced concrete, and the timber shed was raised 6 feet and set on concrete pillars. This building work was all done by the canal staff.

A new machine shop, 30 x 50, built by J. J. Fallon under contract, is ready for occupation, and as soon as the spring rush of work is over the machinery will be moved into it.

A derrick scow, 24 x 70 x 7, was built for the Cornwall canal, and a similar one for the Williamsburg canals. These are built of B.C. fir; and are equipped with a steam hoist.

A working scow, 16 x 55 x 5, for the Murray canal, is under way, and almost completed. It will be taken to the canal as soon as navigation opens. These scows were built by the canal staff.

During the latter part of this season of navigation, and of the previcus season as well, there has been constant complaint of low water. The dredging recently done in the upper reach of the canal had improved conditions somewhat; but it is necessary to face the problem of still further improvement in the supply of a greater depth of water in this head reach of the canal.

Satisfactory progress has been made in late years in improving the entrance to the locks. Work is now under way for improving the lower entrance of lock No. 15. The wooden superstructure of the north lower pier at locks No. 19 and 20, will require soon to be replaced with concrete. New piers are needed at lock No. 21, on the north side, which will complete this class of work.

THE WILLIAMSBURG CANALS

were opened for navigation May 1, and closed December 7, having been operated throughout the season without serious damage, and without prolonged delay to navigation.

On May 3 the lower gates in the lift-lock at the head of the Galops canal were wrecked, and the lock was ready for operation again in 24 hours. During this time all vessels used the canal to make the down trip, instead of going out into the river through the lift-lock. The damaged gates were rebuilt for spares, and, as is usual, the cost was charged against the vessel that did the damage.

At the close of the previous season this same pair of gates had been taken out and rebuilt, and had been replaced in position only a few days when they were wrecked. The gates from the upper end of this same lock were taken out at the end of the present season to be rebuilt and will be replaced in the lock before the opening of navigation.

A pair of spare gates that had been on hand for the old lock at Iroquois, now forming a tail-race for the waste weir, were rebuilt to fit old lock No. 26, at Cardinal, and stepped in the lower end there, as an additional safeguard against leakage. At the same time a bridge was built across this lock to give access to the concrete wharf on the river side, which had just been completed by the canal staff.

The concrete bridge over Flagg's creek, at the head of the Rapide Plat canal, was completed.

The walls of Lock No. 25 required very extensive pointing, which was done in the spring before the opening of navigation.

At lock No. 25, there were put in 24 iron snubbing posts, set in a base of concrete; at lock No. 28, 5 were put in; and 50 were got ready for lock No. 22.

A railing of iron pipe was erected along the sidewalk between the bridge and the weir at Iroquois.

Extensive repairs were made to the riprap; the outer end of the south lower entrance pier was rebuilt; and very extensive work was done in filling the cribs of the wharf at the north lower entrance to the old lock; all on the Iroquois section of the Galops canal.

THE MURRAY CANAL

was opened to navigation on April 19 and closed December 4.

All the structures on this canal are in an excellent state of repair. The ditches are carefully watched and opened up in good season so that there has been no overflow across the banks for some years. Any broken spots in the riprap are at once patched, so that the earth banks are always well protected. And the bridges and houses are kept well painted and repaired.

The shops and the storehouse was moved from the Brighton bridge to a location on the canal lands near the wharf at the Smithfield bridge, and put under one roof. It now makes an attractive one-story building, 25 feet x 50 feet x 12 feet posts, clapboarded, with metal roof, all neatly finished and painted.

I have to draw attention again to the need for greater depth of water in the canal. The traffic continues to increase, and vessel owners are insistent in their demands for a depth of water that will permit loading to St. Lawrence canals draft.

Appended are statements of fines and damages, and water levels.

I have the honour to be, sir,
Your obedient servant,

W. A. STEWART,
Superintendent.

W. A. BOWDEN, Esq., C.E.,
Chief Engineer, Department of Railways and Canals,
Ottawa, Ontario.

Record of highest and lowest levels of water on the 'Ontario St. Lawrence Canals' for year ending March 31, 1912.

Months.	Cornwall Canal.				Farran Point Canal.				Rapide Plat Canal.				Galops Canal.				Lift Lock.		Murray Canal	
	Lock 15.		Lock 21.		Lower Lock 22.		Upper Lock 22.		Lock 23.		Lock 24.		Lock 25.		Lock 27.		Lock 28.			
	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.
1911.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.	Pds.
April	21·7	15·2	15·7	15·1	17·7	16·6	18·0	17·0	16·8	16·0	16·5	15·2	19·3	18·1	15·8	14·9	16·7	15·1	12·9	12·3
May	15·4	15·0	15·8	15·4	18·0	17·0	18·7	17 3	17·8	16·5	16·9	16·0	20·5	19·1	16·0	15·4	16·8	15·6	13·0	12·5
June	15·2	15·0	15·8	15·3	17·6	17·0	18 2	17·4	17·4	16·5	16·8	16·0	20·0	19·2	16 2	15·5	16·8	15·9	13·1	12·5
July	15·1	14·8	16·6	15·2	18·8	16·9	19·2	17·4	18·4	16·5	18·2	15·9	21·6	19·1	16·8	15·4	17 9	15·8	13·0	12·0
August	14·9	14·6	15·4	14·8	17·5	16·1	17·9	16·9	16·6	15·8	16·2	15·2	19·3	18.2	15·8	14·9	16·0	15·0	12 7	12·2
September	14·7	14·3	15·2	14·4	17·0	16·0	17 5	16·5	16·2	15·1	16·0	14·8	18·9	17·8	15 4	14·4	15·6	14·6	12·4	12·0
October	14·7	14·1	15·2	14.3	16·9	15·8	17·2	16·1	16·0	15·0	16·0	14·7	19·1	17·5	15·7	14·3	16·0	14·4	12·1	11·1
November	14·6	14·0	15·7	14·3	17·3	15·8	17·7	16·0	16·9	15·1	16·2	14·6	19·5	17·5	15·8	14·1	16·2	14·3	12·0	10·9
December	15·6	14·3	15·5	14·4	17·6	16·0	17·9	16·3	16·4	15·0	16·0	14·8	19·0	17·1	16·4	14·2	16·4	14·4	12 5	11·4
1912.																				
January	26·3	14·6	16·0	13·4	18·2	16·2	18·6	16·5	17·2	15·0	16 8	13·5	20 1	16·1	16·1	13·4	16·9	14·0	12·3	12·0
February	25·1	22·2	15·0	12 5	19 0	15·9	19·9	16·3	16·5	14·5	14·7	13·0	17·3	18.4	14·8	13·0	15 0	13·4	12·3	11·9
March	25·0	21·7	15·8	14·5	18·2	16·6	19·4	16·7	15·0	14 2	16·3	15·2	17·7	16·6	14·2	13·4	14·5	13·8	12·6	12·0

STATEMENT of fines and damages in connection with 'Ontario St. Lawrence Canals' during season of 1911.

CORNWALL CANAL.

Lock.	Date.	Name of Vessel.	Damage.	Fine.	Name of Owner.	Remarks.
	1911.		$ cts.	$ cts.		
17	May 7....	H. M. Pellatt		25 00	Can. Lake & Ocean Nav. Co	Paid.
	" 6....	Scow and Barge		75 00	Fallon Bros	"
21	" 10....	Simla	10 50		Calvin Co	"
15	" 14....	Barge Cornwall	5 37		Montreal Transportation Co	"
	" 20....	Hecla		5 00	Ogdensburg Coal & Towing Co	"
21	" 28....	Muskoka	3 91		Montreal Transportation Co	"
17	July 5 ...	Simla		10 00	Calvin Co	"
20	" 10....	Waccamaw	25 00		J. L. Croswaite	"
18	May 20 ...	Nicaragua	1,017 19		Ogdensburg Coal & Towing Co	"
	Oct. 5....	Edwards		25 00	Ottawa Transportation Co	"
	" 12...	Onward		5 00	Capt Cline	"
21	Aug. 26...	Bangor	10 29		Montreal Transportation Co	"
	July 10...	Raleigh	416 54		Henry Wineman	"

WILLIAMSBURG CANALS.

24	June 17....	Hilda		50 00	Carbray Son & Co	Paid.
25	July 9....	Keystorm	40 00		Keystone Transportation Co	"
28	May 3....	R. T. Holcomb	611 41		Edwardsburg Starch Co	"

DEPARTMENT OF RAILWAYS AND CANALS,

ONTARIO—ST. LAWRENCE CANALS,
RESIDENT ENGINEER'S OFFICE,

CORNWALL, April 1, 1912.

SIR,—I have the honour to submit herewith my annual report on the works under my direction for the fiscal year ending March 31, 1912.

CORNWALL CANAL.

Improving Upper Entrance to Lock 17.—The contract for this work, which is described in my last annual report, was awarded to Messrs. Fallon Bros., of Cornwall, on June 1, 1910.

Work was immediately commenced and carried on without interruption till the close of the season of 1910.

The water was drawn out of the canal on April 4, 1911, when work on this contract was immediately resumed and by May 1, when navigation opened, the whole of the concrete in the approach wall at the head of the lock had been brought well above the level of water. The head race to the supplementary waste weir was also completed.

The work of filling behind walls, constructing tail race to weir and completing the dredging in canal above lock was immediately commenced and the whole of the work embraced in this contract was finally completed in December, 1911.

The work done has greatly improved the approach to this lock for boats downward bound, while by the construction of the supplementary waste weir no difficulty is experienced in regulating the water in the level above the lock when the mills at the foot of the canal are closed down. The final estimate for this work has been paid.

Improving Upper Entrance to Lock No. 19.—This work, the contract for which was awarded to Messrs. Fallon Bros., of Cornwall, on May 30, 1911, comprises the extension of the short approach wall on the north side of the upper entrance to this lock for a distance of 200 feet. The work consists of a line of cribwork surmounted by concrete walls filled between with stone and covered with a concrete floor

Work on this contract was commenced on July 6 and finally completed on December 6. The final estimate for this work has been paid.

The culvert under the canal at Robertson's creek a short distance below lock No. 20 was extended 30 feet and the high bank at this point, which has for some years been in a leaky condition, was reinforced with a heavy earth embankment.

Seven new valves for the guard weir above lock No. 20 have been constructed and will be placed in position as soon as possible after the opening of navigation.

An addition to the canal office, 17 ft. x 42 ft., was built last season, and completed in a satisfactory manner by day labour.

The increased accommodation thus afforded was very much needed.

A contract was entered into with Mr. J. J. Fallon on August 23, 1911, for the construction of an iron working shop 32 x 53 ft. Work was commenced on this contract in August and the building was completed in December. The final estimate for this work has been paid.

A reinforced concrete coal shed, 23 ft. x 64 ft., was also constructed near the head of old lock No. 17. The work was done by day labour.

Extensive improvements were made to the repairing basin between old locks No. 16 and No. 17. While the canal was unwatered in April, 1911, the old mitre sill and a portion of the platform at the foot of old lock No. 17 were removed, foundations cleaned out, and a new concrete mitre sill and platform put down. A concrete

cut-off wall was constructed at the end of the lock foundation and a concrete culvert was built from the foot of old lock No. 17 to the head of old lock No. 16 along the centre of the repairing basin to carry the leakage. The bottom of the basin was graded and concrete ways built on the south side of this culvert for the use of boats making repairs. A concrete retaining wall, 8 feet high, was constructed along the front of the high level berme from lock No. 17 to lock No. 16, the high level berme was properly graded throughout and concrete ways laid down over the whole area.

On the north side of the basin a concrete retaining wall, 6 feet high, has been constructed for about $\frac{2}{3}$ of the length of the basin, and the grading of the high level berme partially completed.

All of this work, which should be completed this season, will when finally completed, as designed, double the previous capacity of the basin.

A contract was entered into with the Randolph MacDonald Co., Limited, in August, 1910, for certain necessary dredging at different points in the canal and was partially completed during the season of 1910. Work was resumed on this contract on May 11, 1911, and completed on June 9 in a satisfactory manner. High areas in the canal were removed in the vicinity of the upper dam below lock No. 21, and also below locks No. 18 and 19, the head race to the large waste weir at the lower dam was deepened as well as the intake to the weir at lock No. 19. The approaches to the docks at Mille Roche and Moulinette were also widened and deepened.

FARRAN POINT CANAL.

A contract was entered into with The Randolph MacDonald Co. Ltd., on May 22nd, 1911, for improving the lower entrance to this canal which is extremely difficult of approach by vessels, owing to the very strong and variable cross currents in the river. The work as designed comprises the extension of the north entrance pier for a distance of 1140 feet, consisting of a line of heavy cribwork surmounted by concrete walls filled between with stone. The replacing of the top of the present timber pier with concrete walls is also provided for.

The work was commenced on June 17th and vigorously carried on till the close of navigation with the result that the dredging for crib seats was completed, all of the cribs were placed in position and partially filled with stone, and a number of concrete blocks constructed ready for placing in walls.

The remainder of the stone filling was placed in cribs during the winter. Work will be resumed on this contract as soon as the weather will permit and will be carried to completion this season.

RAPIDE PLAT CANAL.

A contract was entered into with Messrs. Fallon Bros. on July 3rd, 1911, for the removal of certain high areas throughout this canal. Work was immediately started and carried to completion on October 29th. All of the known high areas were covered by the dredge and the bottom of this canal is now in very fair condition.

The channel was also slightly widened around the sharp curve at the west end of the village of Morrisburg. The final estimate for this work has been prepared and sent to the department.

Tenders were invited for the work of improving the lower entrance to lock No. 24 on April 15th, 1911.

The result proving unsatisfactory to the department, tenders were again called for on May 19th and the contract for this work was awarded to Messrs. Roger Miller & Sons on September 2nd.

The work as designed comprises the widening and straightening of the canal immediately below the lock, and the construction of a timber and concrete approach wall on the north side of the lower entrance.

Work on this contract was commenced on Sept. 28th and carried on without interruption till Jan. 17th, 1912, when it being found impossible, owing to the severity of the weather, to continue, the work was closed down for the season.

Owing to the delay in awarding this contract the amount of work performed last season fell far short of what was anticipated. Half of the cribs were placed in position and filled with stone, and a good start has been made on the excavation. All of the timber for cribwork has been delivered, and, as soon as the weather will permit, operations will be resumed and the work will be carried on with a view to bringing it as near to completion within the specified time as possible.

A survey was made last season for the purpose of improving the upper entrance to this canal and adapting it to the use of boats passing down the river. A general plan of the proposed improvement together with an approximate estimate of cost has been prepared and sent to the department.

The question of making the upper entrance to this canal possible for downward bound boats demands immediate attention.

During the months of October and November last year, vessels were forced to lighter to 13 feet in order to pass down the river through the Rapide Plat opposite this canal, while it is not safe and well nigh impossible for boats of the larger class to enter the canal from above, as the entrance is at present.

GALOPS CANAL.

A contract was entered into with the Randolph MacDonald Co. Ltd., for improving the upper entrance to lock No. 28, the lock used by downward boats to overcome the Galops rapids.

Work on this contract was immediately commenced and carried on with fair progress till Dec. 12th when operations were suspended for the season.

The work as designed comprises the construction of a timber and concrete approach wall, 725 feet long, on the south side of the upper entrance to this lock, as well as the dredging necessary to prepare seat for same.

Two hundred and forty feet of the cribwork has been completed and concrete blocks, forming the lower part of the concrete wall, placed in position, for the same distance.

The cribs in position have also been filled behind with earth.

Work on this contract will be resumed as early as possible and it is expected will be completed within the specified time.

A concrete superstructure was placed on the old river dock at Cardinal, and a bridge was erected across old lock No. 26 to give access to the dock. The work was done by day labour.

MURRAY CANAL.

A contract having been awarded to Mr. W. E. Phin for the removal by dredging of certain high areas in the bottom of this canal, work was commenced on August 9 and carried on without interruption till November 16, when it was stopped for the season.

Payment for this work was made by the hour for the plant employed and the work was diligently prosecuted and carried on in a very satisfactory manner by the contractor.

There still remains to be removed certain high areas at the entrances to the canal and for this purpose a sum of $9,000 has been included in the estimates for 1912-13.

A survey is now in progress with a view to ascertaining the extent and cost of the work necessary to give a navigable depth of 14 feet in this canal at low water stage in Lake Ontario. As originally designed and built, this canal provided for a depth of 11 feet only at the low water stage of Lake Ontario.

The large increase in traffic through this canal during the past three years, and the increasing number of vessels of the larger class using this waterway would seem to warrant the deepening of this canal to provide a navigable depth of 14 feet at low water stage in Lake Ontario.

I have the honour to be, sir,
Your obedient servant,

C. D. SARGENT,
Resident Engineer.

W. A. BOWDEN, Esq., C.E.,
Chief Engineer, Department of Railways and Canals,
Ottawa, Ontario.

WELLAND CANAL,

SUPERINTENDING ENGINEER'S OFFICE,
ST. CATHARINES, May 3, 1912.

SIR,—I have the honour to report upon the maintenance and operation of the Welland canal and its branches for the fiscal year ending March 31, 1912.

NAVIGATION SEASON.

The canal opened for navigation on April 15, and closed December 15, 1911.

ACCIDENTS.

On Thursday, July 20, 1911, a Grand Trunk engine of the heaviest class, after taking water at the tank at Port Colborne, proceeded westward at 10.45 p.m., when the swing-bridge was open, and fell with the tender into the canal, blocking the channel to navigation. The company's wrecking outfit was brought promptly to the scene and the tender removed on Friday morning. Though the cranes were powerful enough to lift the engine, the chains and other lifting apparatus proved too light, and on Saturday Mr. Hogan's dredge was brought into service and succeeded in pulling the engine down stream and clear of the channel. Navigation was resumed at 2 a.m. Sunday.

Another serious accident occurred during the year, when the steamer *Keywest,* bound up on August 20, 1911, carried away three gates in lock No. 21. Repairs were carried out quickly, spare gates being stepped, and navigation resumed in twenty-four hours.

IMPROVEMENTS—NEW CANAL.

Mr. J. E. Russell completed his contract for widening the canal near Welland. This effects a much needed improvement.

R. D. Weddell & Company completed their contract for the construction of a turning basin at Thorold.

This will enable vessels not wishing to proceed through the canal to be turned at this point.

PORT COLBORNE.

Messrs. Hogan & Macdonnell have not quite completed their contract, entered into in 1900, which covered the bulk of the improvements done at Port Colborne.

Good progress was made by M. J. Hogan in the contract entered into late in the year 1911, for widening the deep-water channel along the west pier and extending the mooring dock west of the government elevator.

The government elevator did a good business, handling 7,000,000 bushels of grain. The receipts for handling paid all operating and repair expenses for the year and left a net surplus of over $20,000. The storage facilities proved inadequate to the business offering, and an appropriation has been granted to increase the storage capacity to 2,000,000 bushels, instead of 800,000 as at present. The foundations for this extension to the elevator were constructed when the elevator was built, and the enlargement will be done during the coming year.

REPAIRS—NEW CANAL.

Ordinary repairs to the structures on the new canal were carried out during the year. Lock No. 18 was unwatered in March, 1912, and the foundation of the upper recess, which had been undermined, repaired in concrete.

REPAIRS—OLD CANAL.

The water was drawn off the old canal for ten days at the beginning of April, 1911, and repairs made to the under-water structures.

Ordinary repairs were carried out during the year.

During October, 1911, a serious washout in the bank of hydraulic race No. 3, leading to the Hedley Shaw Milling Co.'s mill, occurred. The canal repair staff effected temporary repairs speedily, in order to permit the other mills on the race-ways to resume operations. The cost was borne by the company, who are arranging to strengthen this bank and prevent the recurrence of similar accidents in the future.

WELLAND CANAL FEEDER.

Ordinary repairs were made and the back ditches in several places were cleaned out.

The single-track swing bridge above the lock at Dunnville was replaced by the double-track bridge, which formerly crossed the new canal at Welland; the substructure being rebuilt and the bridge adapted to suit the rquirements. Owing to the large amount of highway traffic this was a much needed improvement. A reinforced concrete highway bridge was built across the Welland raceway at Jane street, Welland.

GENERAL.

The water in lakes Erie and Ontario was fairly up to normal all summer, but Lake Erie became low towards the end of the navigation season.

Mr. Wm. Aikens was superannuated on August 1, 1911.

The following superannuated employees died during the year:—

John Steffens, on October 19, 1911.

George Hannah, on December 25, 1911.

Horton Plunstell, on January 17, 1912.
John Paxton, on January 26, 1912.

Attached is a statement of moneys collected for damages caused to canal property by different vessels; also a statement showing the highest and lowest recorded depths of water on the mitre sills of the locks at Port Dalhousie and Port Colborne for each month of the year.

I have the honour to be, sir,

Your obedient servant,

J. L. WELLER,
Superintending Engineer.

To W. A. BOWDEN, Esq.,
Chief Engineer,
Department of Railways and Canals,
Ottawa, Ont.

WELLAND CANAL.

STATEMENT showing the highest and lowest depths of water on the Lower Mitre Sill, Lock No. 1, New Welland Canal, Port Dalhousie, for the fiscal year ending March 31, 1912.

Months.	Lower Sill.		Months.	Lower Still.	
	Highest.	Lowest.		Highest.	Lowest.
1911.	Ft. In.	Ft. In.	1911.	Ft. In.	Ft. In.
April	15 6	14 10	November	14 6	14 3
May	15 7	15 4	December	14 3	14 9
June	15 9	15 5	1912.		
July	15 7	15 3			
August	15 5	15 1	January	14 9	14 6
September	15 1	14 9	February	14 9	14 5
October	15 0	14 6	March	15 1	14 8

WELLAND CANAL.

STATEMENT showing the highest and lowest depths of water on the Upper Mitre Sill, Lock No. 27, New Welland Canal, Port Colborne, for the fiscal year ending March 31, 1912.

Months.	Upper Sill.		Months.	Upper Sill.	
	Highest.	Lowest.		Highest.	Lowest.
1911.	Ft. In.	Ft. In.	1911.	Ft. In.	Ft. In.
April	15 0	13 0	November	16 2	12 3
May	16 5	13 8	December	17 11	12 11
June	15 7	13 11	1912.		
July	16 9	13 11			
August	14 9	12 11	January	15 11	13 1
September	14 8	13 6	February	13 7	10 11
October	14 7	12 11	March	14 0	12 6

WELLAND CANAL.

STATEMENT of damages to Welland Canal Property during the fiscal year ending March 31, 1912, and amount paid on account of said damages.

Date of Damage.	Name of Vessel.	Amount of Damage.	Amount Paid.	Date Paid.	Where Paid.
1911.		$ cts.	$ cts.	1911.	
April 26....	Steamer "Midland Queen".....	71 13	71 13	June 28....	Port Dalhousie.
" 30....	" "Keywest".....	12 38	12 38	" 28....	"
May 19 ..	Brg. "Ceylon"	15 05	15 05	Sept. 21....	"
" 28....	Tug, "Minitago".....	35 21	35 21	Aug. 12....	"
June 3....	Str. "Turret Court".....	16 25	16 25	Sept. 11....	"
" 23....	" "Keystorm".....	105 75	105 75	Nov. 13....	"
July 3....	" "J. R. Langdon".....	38 55	38 55	Sept. 11.. .	"
" 29....	" "Columbia"	25 75	25 75	" 19....	"
Aug. 6....	" "Raleigh '.....	28 98	28 98	Aug. 15....	"
" 8....	Tug "T. C. Lutz".....	17 30	17 30	Sept. 11....	"
" 18...	Str. "Turret Court".....	32 96			
" 19....	" "D. A. Gordon".....	16 15	16 15	.....	"
" 20....	" "Keywest".....	6,967 33	6,967 33	Aug. 22....	"
Sept. 2....	" "Woccomaw".....	26 50	26 50	Jan. 31-12..	"
" 7....	Tug "Argosy".....	31 15	31 15	Nov. 13-11..	"
Oct. 23....	Str. "Keywest".....	164 18	164 18	.....	"
" 24....	S. O. Co. Barge 121.....	25 00	25 00	Oct. 28-11..	"
" 30....	Str. "Toiler".....	18 90			

SAULT STE. MARIE CANAL.

SUPERINTENDING ENGINEER'S OFFICE,

SAULT STE. MARIE, ONT., April 19, 1912.

SIR,—I have the honour to report upon the maintenance and operation of the Sault Ste. Marie canal, for the fiscal year ending March 31, 1912.

The canal was opened for traffic on April 22, 1911, and was closed on December 13, having been in operation for two hundred and thirty-five days.

The traffic passing this point through the Canadian and United States canals, shows a decrease over last year. The freight tonnage amounted to 53,477,216 tons, a decrease of 14·25 per cent, the passengers number 79,591, an increase of 12 per cent, and the registered tonnage of vessels amounted to 41,653,488, a decrease of 16·5 per cent.

While there has been a falling off of 16·5 per cent in the total registered tonnage of both canals, the Canadian registered tonnage, through both canals, has increased by 171,336 tons or 5·5 per cent.

The freight tonnage through the Canadian canal amounted to 30,953,455 tons, a decrease of 15 per cent; the passengers number 38,566, an increase of 14·75 per cent, and the registered tonnage amounted to 19,331,966, a decrease of 17 per cent.

ACCIDENTS.

There were no accidents of such a nature as to seriously interfere with navigation.

On May 12, 1911, while the steamer *E. Y. Townsend* was entering the lock, upbound, the suction from her wheel drew the north lower guard gate away from the wall.

The gate was fastened to the lock wall by a bolt attached to the bridge, and when the gate was drawn away from the wall the bridge lifted, and parted from the gate. The lifting of the bridge was apparently caused by the omission of a bolt on the face of the gate during construction.

On June 19 the steamer *Hamonic* collided with the lock wall, breaking the coping.

On August 8, while the steamer *Isaac L. Ellwood* lay tied up to the eastern end of the upper south pier, the steamer *Kaministiquia*, upbound, took a sheer to port and collided with the *Ellwood* doing damage to the bows of both vessels.

No satisfactory explanation was given as to the cause of the accident, but it was likely caused by the suction between the south entrance wall and the stern of the *Kaministiquia*. When the latter left the entrance wall the suction would cease to act causing the vessel to sheer to port.

On September 8, the steamer *Newona* collided with the lower south wooden pier doing slight damage.

On October 17, at 4.30 a.m., while the steamer *Emperor*, 525 feet long, was locking down, the lockmaster signalled to turn on the water at the upper gates for the purpose of flooding the vessel out of the lock, before the captain was on board, mistaking another man for the captain. The vessel started ahead with the flood before her lines were let go, breaking her lines, breaking the forward chock and carrying away about fifty feet of her railing. The vessel might have been stopped without further damage, had she not dropped her anchor in the lock, with the result that the anchor went through the bottom of the vessel, and caused her to settle on the bottom after she had passed out of the lock.

After lightering a portion of her cargo the *Emperor* proceeded on her way to Port Colborne.

On October 23, the steamer *Caribou* broke all four blades off her wheel on an old gate which had been standing against the end of the lower north pier, and which had fallen over.

REPAIRS.

The work of rebuilding the timber top of the lower north pier, was in progress during the latter part of last season, and about four hundred feet in length was completed. There still remains about seven hundred feet in length, of this pier, to be built, and this work will be done during the coming season.

The repairs to the wickets of the movable dam, which had been damaged by the accident of June 9, 1909, were completed and the dam is now in good condition and ready for service.

The usual cleaning, painting and repair work in connection with the lock, buildings and machinery was performed at the close of navigation last season and during the present spring.

The usual work of looking after the grounds was performed during last season, some trees were planted and a portion of the driveway through the grounds was improved by making a roadbed of cinders.

IMPROVEMENTS.

The improvements to the power house which were approaching completion at the close of the last fiscal year were finally completed by the installing of the new governor and the placing of a reinforced concrete cover over the top of the reservoir which forms the opening in the penstock.

These improvements to the power house have given entire satisfaction in the working of the machinery.

A new shed 24 feet by 75 feet was erected close to the shops for the purpose of storing lumber, iron and other supplies.

The work of rebuilding the upper north pier for five hundred feet in length was completed; and this pier will be used for the first time during the coming season.

The work of extending this pier an additional three hundred feet, is under way and will be completed during the coming season.

The usual statements are attached showing the traffic passing this point through the Canadian and American canals.

I have the honour to be, sir,

Your obedient servant,

W. A. BOWDEN, Esq.,
Chief Engineer,
Department of Railways and Canals,
Ottawa, Ont.

J. W. LEB. ROSS,
Superintending Engineer.

REPORT of Traffic passing Sault Ste. Marie through Canadian and American Canals

Year.	Number of Vessels passed.	Registered Tonnage of Vessels.	Total Freight Tonnage.	Cost of carrying per mile ton.	Estimated Value of Freight Carried.	Percentage of Freight Carried in Vessels.	Number of Passengers.
				Mills.	$	p. c.	
1855	193	106,296	14,503				4,270
1860	916	403,657	153,721				9,230
1865	997	409,062	181,638				19,777
1870	1,828	690,826	539,883				17,153
1875	2,023	1,259,534	833,465				19,685
1880	3,503	1,734,890	1,321,906				25,766
1885	5,380	3,035,987	3,256,628				36,147
1890	10,557	8,454,435	9,041,213	1·3	102,214,948	3·5	24,856
1891	10,191	8,400,685	8,888,759	1·35	128,178,208	4·0	26,190
1892	12,580	10,647,203	11,214,333	1·31	135,117,267	3 8	25,896
1893	12,008	8,949,754	10,796,572	1·1	145,436,957	4·1	18,869
1894	14,491	13,110,366	13,195,860	0·99	143,114,503	3·5	27,236
189	17,956	16,806,781	15,062,580	1·14	159,575,129	3·75	31,656
1896	18,615	17,249,418	16,239,071	1·0	195,146,842	3·0	37,066
1897	17,171	17,619,923	18,982,755	0·83	218,235,927	3·0	40,213
1898	17,761	18,622,764	21,234,634	0·79	233,069,739	2·2	43,426
1899	20,255	21,958,347	25,255,810	1·5	281,364,750	3·1	49,082
1900	19,452	22,315,834	25,643,073	1·18	267,011,959	3·0	58,555
1901	20,041	24,626,976	28,403,065	0·99	289,906,865	4·0	59,163
1902	26,659	31,955,582	35,961,146	0·89	358,306,300	4·0	59,377
1903	18,5 6	27,736,444	34,674,437	0·92	349,405,014	6·0	55,175
1904	16,120	24,364,138	31,546,106	0·81	334,502,686	6·0	37,695
1905	21,679	36,617,699	44,270,680	0·85	416,965,484	5·0	54,204
1906	22,155	41,098,324	51,751,080	0·84	537,463,454	5·0	63,033
1907	20,437	44,087,974	58,217,214	0·80	569,830,188	5·0	62,758
1908	15,181	31,091,730	41,390,557	0·69	470,141,318	7·0	53,287
1909	19,204	46,751,717	57,895,149	0·79	626,104,173	6·0	59,948
1910	20,899	49,856,123	62,363,218	0·74	654,110,844	6·0	66,933
1911	18,673	41,653,488	53,477,216	0 67	595,019,844	6·0	79,951

SESSIONAL PAPER No. 20

SAULT STE. MARIE CANAL.

Comparative Statement Since Opening of Lock September 9, 1895.

—	Season.	Increase or decrease over previous season.	Season.	Increase or decrease over previous season.	Season.	Increase or decrease over previous season.
	1895		1896		1897	
Period Open	Sept. 9. Dec. 6.		May 7. Dec. 10.		April 21. Dec. 14.	
Canad. Regist. Tonnage	125,240		586,571	461,331	398,343	—188,228
U. S. Registered Tonnage	623,131		3,810,794	3,187,663	3,406,018	—404,776
Total Tonnage	748,371		4,397,365	3,648,994	3,804,361	—593,004
Lockages	698		3,042	2,344	2,976	—66
Vessel Passages	1,193		5,189	3,996	4,376	—813
Time Passing Lock	212 h. 27 m.		984 h. 22 m.	771 h. 55 m.	684 h. 11 m.	—300h. 11m.
Average Time Lockage	18·26 min.		18·42 m.		13.97 m.	
	1898		1899		1900	
Period Open	April 11. Dec. 9.		April 26. Dec. 20		April 23. Dec. 16	
Canad. Regist. Tonnage	403,331	4,988	561,759	158,428	579,528	17,769
U. S. Registered Tonnage	2,354,606	-1,051,412	2,388,441	33,835	1,616,139	—772,302
Total Tonnage	2,757,937	-1,046,424	2,950,200	192,263	2,195,667	—754,533
Lockages	2,520	—456	2,610	90	2,205	—405
Vessel Passages	3,712	—664	3,820	108	3,163	—657
Time Passing Lock	609 h. 30 m.	—74 h. 40 m.	643 h. 16 m.	33 h. 46 m.	541 h. 24 m.	—101h. 52m.
Average Time Lockage	14·51 m.		14·78 m.		14·75 m.	
	1901		1902		1903	
Period Open	April 20. Dec. 21.		April 1. Dec. 20.		April 2. Dec. 13.	
Canad. Regist. Tonnage	776,331	196,803	1,336,087	589,756	1,616,385	250,298
U. S. Registered Tonnage	1,672,631	56,492	3,238,069	1,565,438	3,145,020	—93,049
Total Tonnage	2,448,962	253,295	4,604,156	2,155,194	4,761,405	157,249
Lockages	2,906	701	3,418	512	3,242	—176
Vessel Passages	4,243	1,080	5,169	926	4,418	—751
Time Passing Lock	724 h. 38 m.	183 h. 14 m.	925 h. 57 m.	201 h. 19 m.	883 h. 10 m.	—42 h. 47 m.
Average Time Lockage	14·96 m.		16·25 m.		16·34 m.	

SAULT STE. MARIE CANAL.

Comparative Statement Since Opening of Lock September 9, 1895.

—	Season.	Increase or decrease over previous season.	Season.	Increase or decrease over previous season.	Season.	Increase or decrease over previous season.
	1904		1905		1906	
Period Open	April 30. Dec. 26.		April 10. Dec. 20		April 10. Dec. 20.	
Canad. Regist. Tonnage	1,557,335	—59,050	1,799,336	242,001	1,959,186	159,850
U. S. Registered Tonnage.	2,637,090	471,930	3,739,224	1,066,134	4,399,990	660,766
Total Tonnage	4,230,425	530,980	5,538,560	1,308,135	6,359,176	820,616
Lockages	3,012	—230	4,031	1,019	4,152	121
Vessel Passages	4,092	—326	5,853	1,761	5,913	60
Time Passing Lock	811 h. 28 m.	—71 h. 42 m.	1060 h. 38 m.	249 h. 10 m.	1131 h. 23 m.	70 h. 24 m.
Average Time Lockage	16·16 m-		15·79 m.		16.35 m.	
	1907		1908		1909	
Period Open	April 22. Dec. 15.		April 21. Dec. 15.		April 21. Dec. 16.	
Canad. Regist. Tonnage	2,288,349	329,143	2,556,552	268,203	2,912,586	356,034
U. S. Registered Tonnage.	9,887,633	5,487,643	7,038,389	—2,849,244	14,899,562	7,861,173
Total Tonnage	12,175,982	5,8.6,786	9,594,941	—2,581,041	17,812,148	8,217,207
Lockages	4,596	444	3,667	—929	5,046	1,379
Vessel Passages	6,153	240	5,344	—809	6,420	1,076
Time Passing Lock	1378 h. 58 m.	247 h. 35 m.	1258 h. 50 m.	—120h. 08 m.	1853 h. 45 m.	594 h. 55 m.
Average Time Lockage	18.10 m.		20·60 m.		17·31 m.	
	1910		1911			
Period Open	April 12. Dec. 15.		April 22. Dec. 13.			
Canad. Regist. Tonnage	3,122,068	209,482	3,089,863	—32,205		
U. S. Registered Tonnage.	20,227,083	5,327,521	16,242,103	—3,984,980		
Total Tonnage	23,349,151	5,537,003	19,331,966	—4,017,185		
Lockages	6,110	1,064	5,229	—881		
Vessel Passages	8,285	1,865	6,802	—1,483		
Time Passing Lock	2327 h. 40 m.	473 h. 55 m.	1704 h. 25 m.	-623 h. 15 m.		
Average Time Lockage	22·86 m.		19·55 m.			

Note—While the Canadian registered tonnage for 1911 shows a decrease of 32,205 tons, through the Canadian lock, there is in realty an increase of 171,336 tons when both the Canadian and U. S. canals are taken into consideration, as a large number of Canadian vessels went through the U. S. Canal.

SESSIONAL PAPER No. 20

SAULT STE. MARIE CANAL.

ENGINEER'S OFFICE,

SAULT. STE. MARIE, ONT., April 22, 1912.

DEAR SIR,—I have the honour to submit my annual report on the improvements in progress to the entrances of the Sault Ste. Marie canal, for the fiscal year ending March 31, 1912.

REBUILDING OF THE NORTH PIER AT THE UPPER ENTRANCE.

A contract was entered into with Mr. J. J. Collins, on September 18, 1909, and was brought to a satisfactory completion on September 20, 1911. The work embraced in the contract consisted in the removal of the old pier, about 500 feet in length, and the construction of a concrete pier of similar length, on a line and continuous with the north entrance wall from its western end.

Backfilling of suitable material, chiefly rock, was provided at the shore end of the pier, and it will be necessary to extend this work along the full length of the pier this coming season.

EXTENSION OF NORTH PIER AT THE UPPER ENTRANCE.

A contract was entered into with Mr. John F. Boyd, on July 20, 1911, for the construction of a pier 300 feet in length, forming an extension westerly to the north entrance pier. Work was started on this contract September 5, 1911, but slow progress was made owing to the difficulty in obtaining timber at the time the contract was awarded and the lateness of the season in starting work. The total value of work done and material delivered amounted to $16,040.50, or about 42 per cent of the value of the contract. The work accomplished consisted in the framing of two cribs 100 feet in length, and the sinking in place and filling with stone one of the framed cribs.

WIDENING LOWER ENTRANCE.

It is proposed to widen the channelway at the lower entrance during the coming season to provide additional width at a narrow locality in the channel where the boats leaving and entering the lock find difficulty in passing with safety.

I have the honour to be, sir,
Your obedient servant,

F. B. FRIPP,
Engineer in charge.

W. A. BOWDEN, Esq.,
Chief Engineer, Department of Railways and Canals,
Ottawa, Ontario.

RIDEAU CANAL.

SUPERINTENDING ENGINEER'S OFFICE,

OTTAWA, April 1, 1912.

SIR,—I have the honour to submit herewith my report on the Rideau canal for the fiscal year ending March 31, 1912.

Navigation opened at Ottawa on May 7, 1911.
Navigation opened at Kingston Mills on May 1, 1911.
Navigation closed at Ottawa on November 29, 1911.
Navigation closed at Kingston Mills on November 24, 1911.

It will be observed that for the first time for a great number of years, navigation did not open at Ottawa on May 1, there being a delay of one week in this respect, the reason for which was that the Department of Public Works requested us to delay admitting the water into the canal for one week in order to permit the contractors for the new plaza in this city to complete the coffer-dams for unwatering the foundations for the concrete arches which span the canal.

Last year's freshet commenced about April 6; but on account of the light snowfall, it did not amount to anything in volume; and it was passed through the various waste weirs throughout the canal, without material damage being done—in fact so light was the freshet that Rideau lake (the main source of water supply for this canal from Smith's Falls to Ottawa) did not fill up to within seven or eight inches of its normal spring height.

Also our reservoirs at Bob's lake and at Wolfe lake did not fill up to normal height, the former being fifteen inches and the latter five inches below normal after the freshet had subsided.

For these reasons, coupled with the fact that last summer was again unusually dry, through navigation was again suspended above Smith's Falls at the end of September, the lighter draught boats being able to pass through as usual, but the heavier ones being compelled to ply between Ottawa and Smith's Falls only, on the eastern end, and from Kingston to Olivers Ferry on the western end of the canal.

I had an examination made last summer, of the lakes tributary to Rideau lake, with a view to storing the water therein contained, by means of dams at their outlets, so as to feed Rideau lake in low water; but there are only two that could be so utilized; and they are both so small as to render this scarcely worth while, when the cost of acquiring the necessary rights, construction of dams, maintenance, and salaries of caretakers are taken into consideration.

The two lakes referred to are as follows:—

Bass lake, flowing into Rideau lake on its south side, near Olivers ferry; and which is only about one and a quarter square miles in extent, and which could hold back four feet of water.

Black lake, flowing into Rideau lake on its north side, about half-way between Olivers ferry and the Narrows lock, is about two square miles in extent; and could hold back four feet of water; so that the total reserve from these two lakes would amount to about three and a quarter square miles of water four feet deep.

However, as Rideau lake is about sixty square miles in area, this would only add a little over two inches of water to its depth; which is quite out of proportion to the cost of carrying this scheme into effect.

It must also be remembered that these two lakes are situated at some distance from Rideau lake, so that the creeks leading from them to Rideau lake, would have to be straightened and deepened:—all of which materially add to the cost of the work.

I am again glad to be able to report a very substantial increase in the number of lockages throughout the canal:—particularly at Poonamalie lock station, through which 4,658 boats passed last year, an increase of more than 900 over the previous year.

Also in the vicinity of Ottawa the number of boats locking totalled 3,743 last year—an increase of 876 over the year before.

The principal works and repairs executed along the line of the canal during the past fiscal year are as follows:—

OTTTAWA LOCK STATION (8 Locks and 1 Basin).

Considerable repairing was done to about 500 feet of the wharf on the west side of the basin—two to three courses of unsound timber being taken out and replaced with new timber, and the whole replanked with 3-inch plank. A new set of 7

stoplogs of Douglas fir 34′ x 13″ x 16″ was furnished for the river lock. Portions of the roadways round the basin wharves, were repaired and macadamized.

The water in the Ottawa river, the eastern entrance to the canal, fell for one day (October 29), to 5 feet 7 inches on the sill; but this was occasioned by a heavy southwest wind, and it rose again next day to 5 feet 9 inches; and this latter level is really the lowest for the year.

Some difficulty was occasioned to boats entering the lower lock, on account of low water towards the end of the season; and in addition to this the bottom of the lock itself is covered with an accumulation of sawdust and debris from the river; so that considerable lightering of cargoes had to be resorted to by boats coming up from the river into the basin. It must, however, be borne in mind that these boats are usually loaded down to 7 feet, whereas the official draught of water in the Rideau canal is 5 feet.

An attempt was made last January to pump out the river lock for the purpose of cleaning out the above mentioned debris therein, and for this purpose the stoplogs were put in, and the wing walls sheeted all round, and clay placed in front thereof, An eight-inch centrifugal pump mounted on a scow, then attempted to pump the lock; anl although there was only a depth of 9 feet 6 inches on the sill at the time, the water in the lock could not be lowered more than 2 feet 6 inches. I sent divers down to try and locate the leaks, and they reported that the masonry pavement between the wing walls was broken outside the stoplogs; so as it was too late in the season to attempt building a long coffer-dam entirely outside the wing walls, the attempt to pump the lock was abandoned. I propose to try and clean out the bottom of the lock next summer by means of divers.

The cause of the break in the pavement has, I consider, been occasioned by the rush of water from the sluices when emptying the lock (these sluices being in the lower portion of the gates themselves), and is the result of 80 years service. Later on it may be necessary to build a coffer dam and pump the lock for the purpose of repairing this pavement, but there is no immediate danger to navigation from this source.

The roadway down the east side of the locks has been closed by the construction of the new Chateau Laurier, and the upper portions of lock No. 8 have, to a certain extent, been constricted by the building of the new Plaza; but as far as navigation is concerned, no injury has been occasioned; and when these works are completed, the appearance of the locks will be very largely improved.

A number of circular life buoys were purchased last summer for this canal, and were to have been placed at the locks and round the basin, as well as at all the other lock stations; but they were not delivered until after navigation had closed; but will be placed throughout the canal this year.

OTTAWA EAST BRIDGE.

Sundry small repairs were made to the bridge and its approaches; and the roof of the bridge house was re-shingled.

BANK STREET BRIDGE.

A new high level concrete bridge is in process of construction at this point, the work being done by the corporation of the city of Ottawa, and this Department contributing $80,000 towards the cost of the same. The old steel swing span has been loaned to the city for the contractors for the new bridge to utilize on temporary piers, to maintain a crossing until the new structure is completed. The Department, therefore, now have no bridge at this point, and the bridge-house is advertised for sale and removal.

CONCESSION STREET BRIDGE.

Sundry small repairs were made to the bridge railing, and the approaches.

HARTWELLS LOCK STATION (2 Locks).

The rebuilding of the lower masonry wing wall on the east side of the lower lock was completed in April last, and the upper lock chamber was grouted. Some more stone lining was placed along the edge of the tow-path road. The lower wing wall on the west side of the lower lock is now being taken down, and will be rebuilt before navigation opens next month.

HOGSBACK LOCK STATION (2 Locks, 1 Swing Bridge).

A considerable quantity of clay was placed in front of the dam, and some stone was placed on edge of tow-path road. A new boom was framed and placed between the ice-breaker piers above the bulkhead, for a distance of over 400 feet. Considerable repairs were made to the cribwork piers and also to the flooring of both bulkheads, and some new stop-logs were purchased for the channel opening in the waste-water channel. Sundry small repairs were also made to the station in general.

BLACK RAPIDS LOCK STATION (1 Lock).

The roof of the lock-house was reshingled. Small repairs were made to the dam, and some stone was placed therein. The much vexed question of the occupation of the canal reserve land has at length been definitely settled, by a fence being built round the same, by order of the Department; and all the canal reserve at this station is now under the charge of the lockmaster.

LONG ISLAND LOCK STATION (3 Locks, 1 Bridge).

Four piers were rebuilt at the White Horse shoal dam, and also one above Manotick bulkhead. Sundry small repairs were made to the station in general.

MANOTICK BRIDGE.

The entire bridge was replanked with 3-inch plank, and sundry small repairs made.

WELLINGTON BRIDGE.

The entire steelwork of all the fixed spans was cleaned by pneumatic sand-blast, and afterwards painted with Esco steel covering. This was the first bridge on this canal to be so treated; and this method of removing all corrosion, scale, old paint, &c., from the steel, by means of a sand-blast is, I consider, by far the best way to clean a steel bridge before painting, as every portion is cleaned.

BECKETTS LANDING BRIDGE.

The steelwork of the fixed spans of this bridge was also sand-blasted and painted with Esco steel paint. A small building at the end of the bridge was purchased for storing tools, &c.

BURRITTS RAPIDS LOCK STATION (1 Lock).

Some stone walling was built along the north side of the upper cut, in continuation to that built last year. Sundry small repairs were made to the station in general.

BURRITTS RAPIDS BRIDGE.

The bridge-keeper's house was reshingled, and small repairs made to the bridge and approaches. Some new fencing was erected in the vicinity of the bridge.

NICHOLSONS LOCK STATION (2 Locks, 1 Bridge).

Sundry small repairs were made to the station in general.

CLOWES LOCK STATION (1 Lock).

The lock was pumped out and thoroughly grouted with Portland cement, and the upper mitre sill was repaired. A new stable was built for the lockmaster to replace the old one which had fallen into decay. A quantity of clay and gravel was placed above the dam, which will be repaired next winter. Sundry small repairs were made to the station in general.

MERRICKVILLE LOCK STATION (3 Locks, 2 Basins, 2 Bridges).

One pair of new lock gates was framed, and will be hung in position this month. One bridge was replanked, and sundry small repairs were made to the station in general.

KILMARNOCK LOCK STATION (1 Lock, 2 Bridges).

Small repairs were made to the back dam. A new approach was built to the swing bridge across the lock. Portion of the dry stone walling on the south side of the upper cut was rebuilt, and sundry small repairs were made to the station generally.

EDMONDS LOCK STATION (1 Lock).

The lower wing walls, piers, and gate recesses of the lock were taken down and rebuilt, the lock having been pumped for this purpose. A new frame storehouse was built to replace the old one. Some new fencing was erected round the canal reserve, and sundry small repairs made to the station in general.

OLD SLYS LOCK STATION (2 Locks, 1 Bridge).

Extensive repairs were made here last winter, the upper portion of the lock having been taken down and rebuilt. This also included a new masonry sill. The work was rendered somewhat difficult owing to the fact that the water could not be run off the upper level, without destroying the power at the Smith's Falls Electric Company's power-house; and as this meant putting the town in darkness for a month at least, the water was kept up to navigation level by means of a coffer dam above the locks, the company contributing portion of the cost of the same.

The old swing bridge was taken down and a new one framed; and the lay by piers at the head of the lock were rebuilt, having been wrecked by ice last spring. Sundry other small repairs were made to the station in general.

SMITH'S FALLS COMBINED LOCK STATION (3 Locks, 1 Basin, 2 Bridges).

The lower wing walls and gate recesses of the lower lock were taken down and rebuilt. The lower sill was also concreted and repaired. A coffer dam was built below the lock and the lock was pumped in order to carry out the above repairs. The swing bridge over the upper lock and the bridge below the basin, were replanked. One pair

of lock gates was renewed. The lock labourer's house and the storehouse were both painted. Additional filling was placed in the southern portion of the basin; and will be again continued next summer. Sundry small repairs were made to the station generally.

SMITH'S FALLS DETACHED LOCK STATION (1 Lock, 2 Bridges).

The old storehouse was taken down and a new one erected. Repairs were made to the rest piers of the swing bridge below the lock. A five-foot concrete sidewalk was built on the west side of the crossing, from the Lombardy road to the fixed bridge across the by wash; and an iron pipe railing erected thereon.

I have had a survey made of the Lower Cut below the lock with a view to having a concrete wall built along the south side of the same, a distance of about 1,000 feet. This will have the effect of materially checking the great waste of water that flows through the seams of the rock, and which flows underground and emerges as a creek on the side of the Lombardy road.

POONAMALIE LOCK STATION (1 Lock).

The flashboards furnished for the dam (mentioned in my last annual report) were not placed in position last spring, as the water in Rideau lake only raised to the bare level of the crest of the dam; and consequently the flashboards were not required to hold back the water. As stated above, I regret to have to again report that Rideau lake fell so low as to suspend through navigation by the end of September; and the reasons for this I have also mentioned.

The north bank of the upper cut was raised and strengthened. One new pair of lock gates was placed in the lock, and sundry small repairs were made to the station in general.

BEVERIDGES LOCK STATION (2 Locks, 1 Bridge).

Repairs were made to the dam, and a considerable quantity of loose rock and boulders was removed from the basin between the locks. A long stretch of cribwork on the east side below the lower lock in Rideau lake, was rebuilt down to low water mark. Small repairs were made to the sluices and to the station generally.

PERTH BRANCH (1 Basin, 4 Bridges).

All four bridges in the town were sand blasted and painted with Esco steel covering.

New 3-inch flooring was laid on Gore street bridge and on Craig street bridge; and portion of the wharf in the basin was also replanked. Repairs were also made to portions of the rest piers of the bridges, the old timber being taken down to low water mark. This work is not yet completed, owing to the failure of Mr. Wm. Allen, of Perth, to deliver the timber as soon as he had agreed to do. This delay, however, will not seriously affect the security of the piers, which will be completed as soon as possible. Small repairs were made to the tow path roads and banks of the canal generally.

BOB'S LAKE RESERVOIR DAM.

No repairs were made to this dam.

OLIVERS FERRY BRIDGE.

No repairs were made to this bridge.

THE NARROWS LOCK STATION (1 Lock, 1 Bridge).

The approaches on each side of the swing bridge across the lock, were taken down and rebuilt. One hundred cubic yards of gravel were placed on the dam, and sundry small repairs were made to the station in general.

WOLF LAKE RESERVOIR DAM.

The west side of the cribwork breakwater was extended 150 feet out into the lake, and the sand which had drifted in between the eastern and western sides, was excavated to a depth of two feet below the sill of the dam, the effect of which will be that we can now draw off fully two feet more water from the lake than heretofore. The creek below the dam requires to be cleaned out also, and will be attended to later on.

NEWBORO LOCK STATION (1 Lock, 1 Bridge).

One pair of lock gates was renewed. The high level bridge across the canal was re-covered with 3-inch plank, and sundry small repairs were made to the station in general.

CHAFFEY'S LOCK SATION (1 Lock, 1 Bridge).

The new wharf at the head of the lock was completed and filled with stone. The lock labourer's house was raised, and a cellar wall built thereunder. The bridge across the by wash was re-covered with 3-inch plank, and sundry small repairs were made to the station in general.

DAVIS' LOCK STATION (1 Lock).

One new sluice frame was framed and placed in the lock walls, and sundry small repairs were made to the station in general.

JONES' FALLS LOCK STATION (4 Locks, 1 Basin, 2 Bridges).

Four new swing beams were framed and placed in the lock gates and two new sluice frames were placed in the locks, together with four new cast-iron flange valves. A considerable quantity of clay was placed on top of the Big Dam, to fill up holes that appear in the same from time to time. Four new chain blocks were placed on the locks. The lower recess, and the bottom of the chamber of the upper lock were concreted and repaired, and repairs were also made to the upper sill itself. General repairs were made to the masonry of the upper locks, and to the station generally.

MORTON DAM.

Sundry small repairs were made to the dam.

BRASS' POINT BRIDGE.

Small repairs were made to the bridge keeper's house, and to the bridge in general.

BREWERS UPPER MILLS LOCK STATION (2 Locks, 1 Basin, 1 Bridge).

One pair of lock gates and one new sluice frame were renewed, and repairs made to some of the other sluices. The middle sill between the two locks, together with the piers and manholes were grouted with Portland cement, the bottom of one of the latter being filled up with concrete. The storehouse was raised, and a stone wall and new sills placed under the same. Two new brick chimneys were built on the lock-house, and sundry small repairs were made to the station in general.

BREWERS LOWER MILLS LOCK STATION (1 Lock, 1 Bridge).

Sundry small repairs were made to the station in general.

KINGSTON MILLS LOCK STATION (4 Locks, 1 Basin, 2 Bridges).

Two pairs of lock gates were renewed, and repairs were made to the sluices of the locks. A long cribwork pier was built above the upper lock, to enable vessels waiting for the locks to tie up, a long needed improvement. A small pier was also built below the lower lock, as a landing stage for gasoline launches and other small craft. The long bridge over the by wash was replanked, and the apron of the upper lock was also replanked and repaired. A new porch was built to the lockmaster's house, and a new roof built over the annex to the block house—the cost thereof being deducted from the security deposit furnished by Messrs. Fallon Bros., who had the contract for the same.

The road from the by wash to the block house, over the curved stone dam was raised and graded with stone and gravel—the work having been done by contract. Stone was also furnished by contract for the filling of the new lay by piers, and also for the embankments.

GENERAL.

The usual spring repairs, consisting of pointing and grouting the lock masonry; painting of lock gates, &c., &c., were executed by the lock labourers during the month of April.

The heavy dimension stone required for the masonry repairs, was taken out of our leased quarry near Westport, and delivered during navigation along the canal to its destination, by our own tug and scows, as well as by private boats. I may say that we had difficulty in procuring the necessary stone for our work last year, on account of the quarry running out. We moved to another quarry, but it could not furnish heavy enough beds; and we consequently had to divide some of the courses of stone in our lock walls, instead of building them uniform, on account of being unable to get out heavy enough courses of stone in the quarry.

The materials required for the year, such as cement, timber of all kinds, paint, oil, hardware, &c., &c., were purchased for us by the purchasing agent of the department.

DREDGING PLANT.

The dredge *Rideau* was employed for two weeks last summer in removing the rock at the entrance to the harbour at Westport, which rock was blasted ready for dredging the previous season. She then returned to the cut at Saw Log Bay above the Town of Smith's Falls. This cut is now finished; but having been made through drowned land, it will probably have to be cleaned out from time to time, as old logs and roots are liable to be washed from the banks into the channel. The dredge also dug out a channel above the detached lock at Smith's Falls; and was then towed down to Hartwells locks where she wintered, and where considerable repairs to the timber work of the hull were made.

The tug *Loretta* was employed as usual last season in buoying out the shoals, towing scows, delivering stone, timber, cement, paint, oil, &c., along the canal; and also on her annual inspection work. Her steam steering engine was re-modelled last winter, and gave much better satisfaction than formerly.

One of our large flat scows 75 feet x 25 feet, is now having a new deck laid, and will be ready for navigation, and when the season opens the dredge, tug and four scows will be in excellent condition for work.

The following is a statement of the highest and lowest water on the lower mitre sills of locks Nos. 1 and 47 at Ottawa and Kingston Mills Lock Station respectively :—

Ottawa, Lock No. 1.				Kingston Mills, Lock No. 47.			
Highest.		Lowest.		Highest.		Lowest.	
1911	ft.	in.	ft.	in.	ft.	in.	ft.	in.
Apr. 30	15	2	Apr. 1-3	7	10	Apr. 24-31	7	7	Apr. 1-2	7	2
May 10-11	20	8	May 1	16	0	May 20-25	7	9	May 1-7	7	7
June 1	17	11	June 30	13	4	June 10-23	7	11	June 1	7	8
July 1-2	13	2	July 30-31	8	1	July 26-31	7	11	July 5-6	7	9
Aug. 15	8	8	Aug. 29-31	7	5	Aug. 1-6	7	10	Aug. 7-13	7	9
Sept. 1-2	7	1	Sept. 28-30	6	0	Sept. 1-2	7	10	Sept 29-30	7	0
Oct. 31	6	1	Oct. 29	5	7	Oct. 1-19	7	0	Oct. 20-31	6	11
Nov. 30	8	5	Nov. 2-5	6	0	Nov. 26-30	7	0	Nov. 3-21	6	10
Dec. 31	10	10	Dec. 1	8	5	Dec. 1-2	7	0	Dec. 11-17	6	10
1912											
Jan. 1-2	11	0	Jan. 29-31	9	0	Jan. 22-31	7	0	Jan. 1-11	6	10
Feb. 1	8	11	Feb. 16-18	7	11	Feb. 1-17	7	0	Feb. 23-29	6	10
Mar. 18-25	8	3	Mar. 1	7	11	Mar. 31	7	5	Mar. 1	6	10

I have the honour to be, sir,
Your obedient servant,

A. T. PHILLIPS, *M. Can. Soc. C.E.*
Superintending Engineer.

W. A. BOWDEN, Esq., C.E.,
Chief Engineer,
Department Railways and Canals,
Ottawa, Ont.

TRENT CANAL.

SUPERINTENDING ENGINEER'S OFFICE,

PETERBOROUGH, April 16, 1912.

W. A. BOWDEN, Esq.,
Chief Engineer,
Department of Railways and Canals,
Ottawa, Ont.

DEAR SIR,—I have the honour to submit my annual report for the fiscal year ended March 31, 1912, covering the work of construction chargeable to 'capital,' Trent canal.

ONTARIO-RICE LAKE DIVISION.

This division extends from Trenton, on Lake Ontario, to Rice lake, a distance of fifty-six and a half miles, a detailed description of which was given in my annual report for 1910.

For construction purposes the division has been divided into seven sections, or contracts; all of which are under contract. The estimated value of these seven contracts as revised to date is about $5,100,000, on which there was expended for work done and materials delivered up to march 31, 1912, the sum of $2,869,753.30, or about 57 per cent of the estimated value of the seven contracts at their respective contract rates.

There are on the division 18 locks, 14 dams and 18 bridges. Locks 1, 2, 3, 5, 6, 7, 10, 13, 14 and 18 are built and 4, 11, 12, 16 and 17 are each 50 per cent finished. Dams 2, 3, 5, 6, 7, 11 and 12 are built and 1, 4, 9 and 13 are each 50 per cent or more finished. Eleven bridges are finished and in commission, and three more are under construction.

Section No. 1.—This section extends from Trenton to Glen Miller, a distance of about four and one-half miles, on which length of the river there are three locks, three dams and five bridges.

A contract for the work was entered into with Messrs. Larkin and Sangster on March 10, 1908. The total value of work done and materials delivered up to March 31, 1912, amounted to $905,135.71, or about 86 per cent of the value of the contract.

The principal items of work done are 245,327 cubic yards earth, 12,160 cubic yards loose rock, 222,156 cubic yards solid rock, and 68,909 cubic yards concrete.

Locks 1, 2 and 3 are finished, and also dams 2 and 3. Dam No. 1 is 80 per cent built and will be finished early this summer. The entrance piers of the locks, together with the short canals leading into and out of them are finished. The submarine channel connecting the lower end of the canal leading into Lock No. 1, and the mouth of the river is about 33 per cent dredged, and 62 per cent of the balance has been drilled and blasted. The dredging of this channel which consists of rock excavation has been sub-let by the contractors to Mr. Robert Weddell who intends completing it this season. A drill boat resumed work for the season on March 14.

The Sidney Electric Power Co. have completed their hydro-electric development at the west end of Dam 2. The equipment consists of four double runner vertical shaft turbines of 1,400 H.P. maximum. The alternating current generators are of the vertical shaft umbrella type, having a normal rated capacity of 750 K.W. at 80 per cent power factor or 937·5 K.V.A. In connection with this plant the company have built close to it a large transformer building, which is to be used as the distributing point for all power generated between Trenton and Frankford. The current is stepped up from 6,600 volts delivered from the power houses, to 44,000 volts for

transmission to various parts of the country by 3,000 K.V.A. 3 phase transformers. This plant began operation on September 1, 1911.

Under a deed dated June 5, 1911, the Town of Trenton transferred to the Crown the swing span in the west end of the highway bridge crossing the mouth of the Trent river in the Town of Trenton. This swing bridge is now owned and operated by this department. It consists of a small truss span, and provides two 51 feet clear openings for navigation. The west abutment and pivot pier are stone masonry. The east pier is a crib block. The structure as a whole is not in first-class condition, and a new bridge will probably have to be built here a few years hence, providing a greater clear width of opening for navigation.

The Canadian Northern Railway crosses the Trent river about 2,000 feet above its mouth, by a bridge consisting of eight 65 feet deck plate girder spans, and a swing span which provides two 70 feet clear openings for navigation. The bridge was built by the railway company who finished the structure on July 12, 1911, and placed it in commission about August 1, 1911.

The substructure of the Gilmour siding bridge at Lock No. 1 is built up to water level, but cannot be finished until the type of the superstructure is definitely decided upon.

The main line of the Grand Trunk Railway crosses the canal below Lock No. 1 by a high level bridge, built by the railway company under an agreement dated June 9, 1909. The bridge was finished and placed in commission on July 2, 1910. It is designed for three tracks and provides a clear head room of 27 feet at a stage of high water in Lake Ontario.

One of the fixed spans at the east end of the Glen Miller highway bridge has been taken out, and a swing span built in its place, which was opened for traffic at the end of February, 1909.

It is very probable that all the work remaining to be done on this section will be completed this season.

Section No. 2.—This section extends from Glen Miller to Frankford, a distance of about four and a half miles, on which stretch of the river there are three locks, three dams and one bridge.

A contract for the work was entered into with Messrs. Dennon & Rogers on May 30, 1908. The total value of work done and materials delivered up to March 31, 1912, amounted to $370,873.70, or about 51 per cent of the value of the contract.

The principal items of work done are 82,481 cubic yards earth, 12,976 cubic yards loose rock; 80,988 cubic yards solid rock, and 44,234 cubic yards concrete.

Locks 5 and 6 are built, and also dams 5 and 6, except the platform across the top of the piers of dam 5. Lock and dam 4 are each 40 per cent built. Both of these structures should be finished early this fall. The upper and lower entrance piers of locks 5 and 6 are built and their entrance channels are partly excavated. There is 90 per cent of the rock excavation on the section above water taken out, but only 21 per cent of the rock under water; the greater part of the latter yet to be done lies in the river channel above Dam No. 6.

The County of Hastings rebuilt last year the Frankford highway bridge across the Trent river. The new bridge consists of a concrete substructure supporting five through truss 100 feet spans with a concrete floor which was manufactured and erected by the Ontario Bridge Co., Ltd., Toronto. It is connected by an earth embankment with the swing bridge built across the canal in the spring of 1910. The embankment connecting these bridges, and the east approach of the canal bridge were sufficiently made up last fall to permit the bridges being opened for traffic on November 18.

The Sidney Electric Power Co. are constructing a hydro-electric power plant in rear of the west end of Dam No. 5, for the complete development of the power at this point. They hope to have the plant running by midsummer. The current will

be delivered under low voltage to their large transformer station at dam 2, where it will be stepped up for transmission to various parts of the country.

Work on this section is proceeding slowly, and it will take the contractors at least two years with a well equipped and organized force to complete their contract.

Section No. 3.—This section extends from Frankford to a point three miles west of Glen Ross, a distance of seven and a half miles. At Glen Ross there are a lock, a dam and two bridges.

A contract for the work was entered into with the Canadian General Development Co., Ltd., on April 24, 1908. The total value of work done and materials delivered up to March 31, 1912, amounted to $181,042.32, or about 63 per cent of the value of the contract.

Lock and Dam Nos. 7 at Glen Ross, and the short canal above and below the lock are finished. The bridges across the Canal above the lock for the Frankford highway, and the Central Ontario Railway are also finished and in use. The C.O. Ry. bridge was placed in commission on April 29, 1909.

The whole of the work on this section is finished with the exception of the dredging in the river, on which no work has yet been done, as the contractors have no dredging fleet on the ground, and are waiting until they can bring one up the canal from Lake Ontario.

Section No. 4.—This section extends from Adam's Landing, a point three miles west of Glen Ross, to Campbellford, a distance of about fourteen miles. There are between Bradley Bay and Campbellford five locks, three dams, four bridges, and about one mile of concrete retaining wall, for enclosing the river through the Town of Campbellford, together with a large quantity of earth and rock excavation.

A contract for the work was entered into with Messrs. Haney, Quinlan & Robertson, on June 22, 1910. The total value of work done and materials delivered up to March 31, 1912, amounted to $425,252.74, or about 32 per cent of the value of the contract.

The principal items of work done are 131,130 cubic yards earth, 2,200 cubic yards loose rock, 93,430 cubic yards solid rock, and 45,860 cubic yards concrete.

Lock 10 is built, and 61% of the concrete in Locks 11 and 12 is built, and the balance will be laid early this summer. Dam No. 9 is 35 per cent built, but will not be finished until all work in connection with dam 8 is completed. Considerable difficulty was experienced in connection with the construction of this dam last summer, due to the unforeseen depth at which the surface of the solid rock was found at the centre of the river for a distance of about 75 feet, measured along the axis of the dam. In order to take care of the water in this hole, about 25 feet deep, the contractors had to increase their pumping capacity very considerably over what they originally anticipated would be required to unwater the foundation, which troubles prevented the completion of the dam last season. The concrete wall connecting the back of the dam with the head of Meyers island is finished.

The supply weir for power below dam 9 is built, together with the concrete wall connecting it and the east end of the dam.

The supply weir for power at the head of lock 12, the upper entrance piers of the lock, and the retaining wall connecting them to the weir are finished.

The concrete culvert under the canal, a short distance above lock 12, is built and in commission, together with about half a mile of sewer pipe laid along the gravel road, which sewer discharges into the culvert.

The piers for the highway bridge across the head of lock 12 are built, and the superstructure of the bridge is 90 per cent erected.

The substructure for the bridge of the Northumberland Paper Mills railway siding is built, but as the contract for the superstructure has not yet been let, a wooden trestle has been erected across the canal close to the south end of the piers for temporarily carrying the siding across the canal. The diversion was completed last winter, and traffic diverted about February 1.

The concrete core walls in the embankments forming the canal prism above lock 12 are 90 per cent built, and about 70 per cent of the excavation for the prism has been taken out.

Trout creek was diverted on August 3, 1911, through the aqueduct built for this purpose north of the Grand Trunk railway, and the bridges over its ends for the crossings of the gravel road and Balaclava street were finished in December last.

During this season all work in connection with locks 10, 11 and 12, and the short canals above them will be finished. Lock 9 and dam 8 will also be built, for the construction of which 27,000 barrels of cement were delivered on the ground during the winter. Part of the river walls between the Grand Trunk railway and highway bridges in the town of Campbellford, together with the substructure of the Bascule span in the highway bridge will also be built, provided the old Campbellford dam is removed early this summer. The contractors have about $80,000 worth of plant on the section and are preparing to do a very large amount of work this year. It will take two seasons to complete the structures on this section, and three to finish the excavation.

Section No. 5.—This section extends from Campbellford to Crow bay, a distance of three miles. On this section are two locks, two dams, and about half a mile of concrete wall for enclosing the river through Campbellford.

A contract for the work was entered into with Messrs. Brown & Aylmer on September 28, 1907. The contract was amended May 30, 1911, so as to include the construction of the river walls. The total value of work done and materials delivered up to March 31, 1912, amounted to $500,466.86, or about 74 per cent of the value of the contract.

The principal items of work done are 110,980 cubic yards earth, 26,310 cubic yards loose rock, 44,770 cubic yards solid rock, and 51,695 cubic yards concrete.

Locks 13 and 14, and dams 11 and 12 are built, and about 65 per cent of the river walls. The excavation of the channel leading down from Crow bay to lock 14 is finished. It has been swept and found satisfactory. On July 5 last the contractors locked their dredging fleet down through the lock, and continued dredging for the balance of the season, in its lower entrance. As the gates of the lock are not built, the contractors erected on the lower mitre sills temporary gates composed of gate timbers piled one on the other. For the upper gates, stop-log timbers placed in the gains at the head of the lock were used. While the lock was full we tested the operation of the 4 feet by 5 feet waggon valve under a head of 23 feet, a description of which was given in my annual report for 1910. Two men could raise the valve the first 8 inches, at which point of its travel the load was too much for them. Four men could easily operate the valves. The maximum dynamometer reading for the lower right valve was 140 pounds, applied at 4 feet radius. Considering the valves had been in place nearly two years and not in use, they worked very satisfactorily.

The Seymour Power & Electric Company's plant at dam 11, and the Campbellford Municipal plant at dam 12, were in continuous operation throughout the year.

No work has yet been done in the river channel between the Campbellford highway bridge and lock 13. It will take at least two seasons to complete the dredging on this section.

Section No. 6.—This section extends from the lower end of Crow bay to 1,000 feet west of Heeley Falls bridge, a distance of about three miles. There are three locks, one dam, and one bridge on the section, together with a large quantity of earth and rock excavation. The short canal at this point is located on the west side of the river and is designed to overcome the 76 feet rise between Crow bay and the fourteen miles of river reach between Heeley Falls and Hastings.

A contract for the work was entered into with Messrs. Haney, Quinlan & Robertson, on May 23, 1910. The total value of work done and materials delivered up to

March 31, 1912, amounted to $262,596.87, or about 50 per cent of the value of the contract.

The principal items of work done are 24,650 cubic yards earth, 20,400 cubic yards loose rock, 85,470 cubic yards solid rock, and 33,089 cubic yards concrete.

Locks 16 and 17 are 60 per cent built and dam 13 70 per cent. The retaining wall connecting the locks and dam is also about 50 per cent built. The substructure of the swing span that is being placed in the east end of the Heeley Falls highway bridge is finished, and the superstructure which is delivered on the ground will be erected early this summer. The canal connecting locks 16 and 15, and the foundation for the latter is partly excavated.

The Eastern Power Company, Ltd., who are operating under lease No. 18,527 granted to the Northumberland-Durham Power Company, have let a contract for the construction of a power-house, &c., for the full development of the hydro-electric power at this point, which will be ready for operation on completion of the works of section No. 6.

It is probable that all the concrete work on the section will be finished this season, but the completion of the excavation will run into the summer of 1913.

Section No. 7.—This section extends from Heeley Falls to Rice lake, a distance of about nineteen and a quarter miles. The principal works consist of a large quantity of earth and rock dredging in the river, the construction of a new lock and dam at Hastings, and a new and longer swing span at Trent Bridge, and new guide piers for the Grand Trunk Railway bridge at Hastings.

A contract for the work was entered into with the Randolph Macdonald Co., Ltd., on January 4, 1909. The total value of work done and materials delivered up to March 31, 1912, amounted to $224,385.10, or about 52 per cent of the value of the contract.

The principal items of work done are 17,718 cubic yards earth, 16,703 cubic yards loose rock, 37,050 cubic yards solid rock, and 12,089 cubic yards concrete.

The new lock was placed in commission on March 30, 1911, and used all last season. The dam is about 50 per cent built, and will probably be finished early this fall. After working the whole of last season trying to unwater the foundation for the north half of the dam, the contractors succeeded in building three sluices at the north end, and the four sluices across Fowld's raceway on the south shore. The chief cause of their trouble was using the old dam as part of the cofferdam, enclosing the site of the new structure, which proved a complete failure, after wasting five months trying to stop the leaks through and under it.

The pivot pier and abutments for the new swing pan at Trent Bridge are built, and the superstructure completed. The bridge was placed in commission on June 5, 1911. The guide piers will probably be built this season.

The new guide pier for the Grand Trunk Railway bridge is built, and is a great improvement to navigation at this point.

The 30 per cent of the excavation on the section taken out to date has chiefly been done between Hastings and Rice lake, on which section of the river 90 per cent of the excavation is finished. The dredging fleet now comprises two dipper dredges, two drill boats, two tugs, and several dump scows, which plant will take at least three years to finish the work.

BURLEIGH FALLS DAM.

A contract for the new dam, a description of which was given in my report for 1910, was entered into with Messrs. Bishop & Buchanan on December 14, 1909. The total value of work done and materials delivered up to March 31, 1912, amounted to $48,746.20, or about 83 per cent of the value of the contract.

The concrete work is finished, except the breast wall of two sluices, and the platform over five sluices. The whole of the works embraced in the contract will be completed early this summer.

LINDSAY SECTION.

The construction of the lock, dam and substructure of the Wellington street highway bridge, embraced in Messrs. J. Ritchie & Co.'s contract, was completed in September 1910, at a cost of $42,099.41. The new lock was placed in commission in July, 1910.

The Hamilton Bridge Co.'s contract for the superstructure of the bridge, which is a 'Strauss' bascule a description of which was given in last year's report, was finished last summer at a cost, including electrical equipment, of $17.550.78. It was placed in commission for vehicular traffic on April 27, 1911, and its mechanical and electrical operation throughout the whole of the past season was very satisfactory.

ROSEDALE SECTION.

The works on this section consist of a canal across the narrow peninsula between Cameron and Balsam lakes, a lock, dam and dredging in the Gull river between its confluence with the canal and deep water in Balsam lake. The improvements are being built to the same dimensions as the Ontario-Rice lake division of the canal.

A contract for the work was entered into with the Randolph Macdonald Co., Ltd., on February 24, 1908. The total value of work done and materials delivered up to March 31, 1912, amounted to $249,987.85, or about 90 per cent of the value of the contract.

The lock and dam are built, and have been in use since 1910. The whole of the works embraced in the contract are practically finished except the dredging which will probably be completed by midsummer, when the company's dredging fleet will be taken down to Section No. 7, Ontario-Rice lake division.

HOLLAND RIVER DIVISION.

This division is divided into two sections. Section No. 1 extends from Cook's bay, Lake Simcoe, to Holland Landing on the east branch of the Holland river, a distance of eight and one-half miles. Section No. 2 extends from Holland Landing to Newmarket, a distance of four and one-third miles. The whole of Section No. 1 is on the Lake Simcoe level, and the total rise between Holland Landing and Newmarket is forty-three feet which will be overcome by three locks.

Section No. 1.—A contract for the construction of this section was entered into with the Lake Simcoe Dredging Co. on August 30, 1906. They abandoned the work in the fall of 1907, and it was taken out of their hands in May, 1908, since which date no work has been done on the section, other than some clearing of the right-of-way which the department did last fall by day's labour.

Section No. 2.—A contract for the construction of this section which consists of three locks, three dams, four highway bridges, one dock, and a large quantity of earth excavation, stone protection lining, &c., was entered into with Mr. John Riley on February 12, 1908, and assigned by him to Messrs. Russell, Dill and Lothian on February 19, 1908, and by them to the York Construction Co., Ltd., on April 3, 1908, The total approximate value of work done and materials delivered up to December 31, 1911, amounted to $522,675.54, or about 83 per cent of the value of the contract.

The three locks and dams are built, and also the Green lane, Concession road and Yonge street bridges, which are in commission. The Newmarket basin and dock walls are built, and about 81 per cent of the excavation on the section has been taken

out. The material yet to take out is chiefly on the Lake Simcoe level, below lock No. 1.

The Government in December last decided to abandon further work on the Holland River division, and accordingly accepted the surrender of the York Construction Company's contract on December 31, 1911, and the execution by them, under a special agreement, of certain unavoidable work in connection with the road approaches to the Second Concession and Yonge street bridges, which work is approaching completion. A final estimate of the work done under the original contract is now being prepared.

QUEENSVILLE ROAD BRIDGE.

This bridge crosses the east branch of the Holland river about two miles north of Bradford road, Holland Landing. The structure was fully completed in June, 1908, and has been in commission since August, 1907.

BRIDGES.

A contract was entered into with the Hamilton Bridge Works Company, Ltd., on October 10, 1908, for the manufacture of six highway swing-bridges, and one railway swing-bridge.

This contract was completed last December, at a total cost of $73,160.

The Glen Miller bridge was placed in commission at the end of February, 1909.

The Frankford bridge was completed in June, 1910, but was not placed in commission until November 18, 1911.

The Glen Ross highway bridge was finished and placed in commission in April, 1909.

The Central Ontario railway bridge at Glen Ross was finished and placed in commission on April 29, 1909.

The Green Lane bridge, Holland River division, was placed in commission in March, 1909.

The Second Concession bridge across the head of lock No. 2, Holland River division, was placed in commission on October 23, 1911.

The Yonge street bridge across the head of lock No. 1, was placed in commission on February 28, 1911.

On April 6, 1910, a contract was entered into with the Hamilton Bridge Works Co., Ltd., for the manufacture and erection of a 'Strauss' Bascule highway bridge, at Wellington street, Lindsay, Ont., which was placed in commission on April 27, 1911. The mechanical and electrical operation of the bridge during the past season was very satisfactory. The electrical equipment was manufactured and installed by the Canadian General Electric Co., Ltd.

On October 24, 1910, a contract was entered into with the Cleveland Bridge and Engineering Company, Ltd., for the manufacture and erection of highway swing-bridges at Heeley Falls and Trent Bridge, Ontario-Rice Lake division.

The swing span at Trent Bridge was placed in commission on June 5, 1911.

The span for Heeley Falls bridge is delivered on the ground, and will be erected early this summer.

On June 30, 1911, a contract was entered into with the Hamilton Bridge Works Company, Ltd., for the manufacture and erection of a 'Strauss' highway bascule bridge over the canal at Bridge street, Campbellford, Ont. The bridge will be a single leaf of the Heel trunnion type, consisting of a 108 feet through truss movable span, and a 35 feet tower span carrying the counterweight. It is now being manufactured and will be probably be erected this summer. It will be electrically operated.

A contract was entered into on August 4, 1911, with the Dickson Bridge Works Company, Ltd., Campbellford, Ont., for the manufacture and erection of a highway swing span across the head of lock No. 12, Ontario-Rice Lake division. The steel is manufactured and erected in place and the bridge will be finished early this summer.

VALVES FOR LOCKS.

Wagon valves.—A contract for the manufacture and erection of the wagon valves required for the new locks, and regulating culverts of the canal, was entered into with the Dominion Bridge Company, Ltd., on October 5, 1908, since which date the valves for locks 1, 2, 3, 5, 6, 7, 10, 13, 14 and 18 of the Ontario-Rice Lake division, and those for the Rosedale lock, have been installed. The valve frames for lock No. 4 are in place and those for lock No. 9 and the regulating culvert at this point are delivered on the ground as are also those for the regulating culvert at lock No. 17. All the metal for the remaining valves and frames is fabricated and stored in the company's yards at Montreal, ready for shipping. A description of these valves was given in my report for 1910.

Cylindrical valves.—On April 6, 1911, a contract was entered into with the Wm. Hamilton Company, Ltd., for the supply and erection of the cylindrical valves for flight locks 11 and 12 (Ranney Falls), and flight locks 16 and 17 (Heeley Falls), Ontario-Rice Lake division.

These valves are now manufactured and stored in the company's yards at Peterboro, and will be delivered and erected in the locks this summer.

LOCK GATE OPERATING MACHINES.

A contract was entered into with Mr. Herbert B. Collier on May 7, 1909, for the supply and delivery of operating machines, anchorage fittings and pivots required for the lock gates of the new locks along the canal. These machines are being manufactured by the Wm. Hamilton Company, Peterboro.

The operating machines, anchorage fittings and pivots for the Rosedale and Lindsay locks, and locks 1, 2, 3, 5, 6, 7, 10, 13, 14 and 18, Ontario-Rice Lake division, and locks 1, 2 and 3, Holland River division, have been installed, and all the material for the remaining locks of the Ontario-Rice Lake division has been delivered on the ground.

EMERGENCY STOP-LOG APPARATUS FOR HEAD OF LOCKS.

On April 5, 1911, a contract was entered into with the Dominion Bridge Company, Ltd., for the supply, delivery and erection of seven sets of emergency steel stop-logs and bridges. They are now partly manufactured and will be erected this summer at the head of locks 6, 7, 12, 14, 17 and 18, of the Ontario-Rice Lake division, and also at the Rosedale lock. The steel gains for these logs are now erected in place at all the above locks, except No. 17.

GENERAL.

Cement.—About 154,000 barrels of Portland cement were delivered on the canal the past year, under contracts with the Canada Cement Company and the Alfred Rogers, Ltd.

Lock gates.—Plans and specifications are in course of preparation for the lock gates required for seventeen locks of the Ontario-Rice Lake division.

Lake surveys.—No charts of the chain of lakes which form part of the Trent navigation have ever been made, and with the object of making a complete and

reliable set of charts for these inland waters, hydrographic surveys of the lakes were begun four years ago, and have since been intermittently carried on. Only a small amount of work was done last year. The field work covering Rice, Lovesick, Cameron and Balsam lakes has been finished, and a large amount of work done on the surveys of the Otonabee river, Sturgeon lake and the Scugog river, but very little of all this field work has been plotted.

Severn river.—In accordance with instructions received last December, a very thorough survey of the Severn river is being made, with the object of preparing plans and specifications for the work of canalizing the river to the same dimensions as the Ontario-Rice Lake division. The work was begun early in January, under Mr. E. B. Jost, since which date a large amount of field work has been done between Matchedash bay and Ragged rapids.

I am, sir,
Your obedient servant,

ALEX. J. GRANT,
Superintending Engineer.

TRENT CANAL.

SUPERINTENDENT'S OFFICE,

PETERBOROUGH, April 24, 1912.

SIR,—I have the honour to submit herewith my annual report of the maintenance and operation of the Trent canal for the fiscal year, from April 1, 1911, to March 31, 1912.

The extent of the canal completed is the same as last year, namely, 160 miles.

OPENING AND CLOSING OF NAVIGATION.

	Opened.	Closed.
Peterborough-Hastings division.	April 15.	December 16.
Peterborough-Lakefield division.	May 1.	November 11.
Lakefield-Fenelon Falls division.	April 20.	November 21.
Balsam lake-Lake Simcoe division. . . .	May 15.	November 1.

PETERBOROUGH LIFT-LOCK OPENED.

The Peterborough hydraulic lift-lock was operated on May 9.

HEALEY FALLS TO BOBCAYGEON.

The following work was performed during the year on the Healey Falls to Bobcaygeon division:—

Kylie's Landing.—A splendid new dock was built at Kylie's landing, in the interests of shipping and navigation.

Hastings swing-bridge.—Considerable repairs were done to the Hastings swing-bridge.

Dummitt's Landing dock, Rice Lake.—Considerable repair was done to Dummitt's landing dock, Rice lake.

Smithsons dock, Otonabee River.—Some general repairs were done to Smithson's dock, Otonabee river.

Otonabee River.—The navigation channel on the Otonabee river was buoyed out,

making it navigable for the largest steamers on the Trent waterway, and facilitating shipping to a great extent.

Campbelltown dock, Otonabee River.—A new dock was built at Campbelltown landing, at a cost of $1,300.

Otonabee River.—A considerable amount of dredging was done on the Otonabee river, at Yankee Bonnet, at a cost of $4,373.17.

Peterborough dock, at Peterborough.—A splendid new $20,000 dock is in the course of construction. This will be a great improvement to shipping and the tourist trade along the Trent canal.

Peterborough flood-dam.—Considerable repairs were done to the Peterborough flood-dam.

Peterborough hydraulic lift-lock.—A new electric lighting system was installed at the Peterborough hydraulic lift-lock at a cost of $4,490.30. This greatly improves the appearance of the lock and makes it possible to lock the boats through after dark. Two new lockhouses were also built for the lockmasters and the assistant lock master, at a cost of about $3,000 each. Considerable work was required on the banks of the hydraulic lift-lock, Peterborough. A puddle core was put in the canal bank above the lift-lock on the west side, 175 feet in length and 13 feet deep, about 40 feet above the concrete work to the north. This was to protect the banks. Another core was put in on the east side under the wing wall, 40 feet long and 13 feet deep. This prevents the water from leaking through under the stairs of the lock. About 500 shade trees were planted on the banks of the canal, between the lift-lock and Nassau. This will greatly improve the appearance of this important waterway. The steel structure on the lift-lock was repainted.

Booms, slides and dams.—The platforms on the dams between Peterborough and Lakefield, viz., Nassau dam, dams No. 5, No. 4, No. 3, No. 2, and Lakefield dam, were replanked.

Painting.—The lock gates of Nos. 5, 4, 3, 2 and Lakefield were repainted as well as the lockhouses between Peterborough lift-lock and Lakefield.

Dredging.—Considerable dredging was done between Lakefield and Young's point —at Lakefield dock, and Henderson's narrows, to a depth of 9 feet.

Booms and slides.—About four miles of booms between Lakefield and Young's point, dividing steamboat channel from log channel, were repaired and replaced.

Young's Point.—The gas plant was overhauled at Young's point.

Stoney Lake.—The buoys in Stoney lake were repainted and replaced.

Mt. Julian dock at Mt. Julian Landing.—A new dock was built at Mt. Julian. This is a crib dock, filled with stone and gravel.

South Beach dock, Clear Lake.—A new dock was built at South Beach, Clear lake.

Young's Point.—A new concrete pier at lower entrance to Young's point locks was built.

Chemong Lake.—A substantial new landing pier was built at Selwyn, at a cost of about $1,300.

Buckhorn.—Three new reinforced concrete piers were built at this point; two at entrance to lower reach, and one at entrance to the upper reach.

Plant.—The entire plant was kept in good repair. A new scow, No. 13, 75 feet in length with 17-foot beam, was built.

Bobcaygeon.—The lockhouse at this point was repainted and papered.

BOBCAYGEON TO BALSAM LAKE.

The following work on the division extending from Bobcaygeon to Balsam lake was carried on during the year.

Dredging.—Considerable dredging was done in the Scugog river, which lasted for about three months. The work consisted of rock excavation, starting up at the new lock, Lindsay street, and extending down below Wellington street bridge, about 5 feet of rock taken out, making a 9-foot channel.

Scugog River.—Ten new Siche gas plants were installed in the lighthouses on the river. Buoys, defining the navigation channel, were repainted. The swing-bridges at Lindsay street and the Lindsay street south, or Ops bridge, were repainted and replanked.

Navigation channel between Lindsay and Port Perry.—Sixty-six new buoys were placed in the river, defining the navigation channel.

Sturgeon Lake.—Considerable dredging was done in Sturgeon lake. Twelve new buoys were placed at the entrance leading into the river at Fenelon Falls, and the entrance of the old Lindsay river leading into Sturgeon lake, enabling the steamboat men to define the channel.

Fenelon Falls.—The swing bridge at the lock was replanked and the lockgates repainted, as well as the lockmasters' houses, which were also papered, and other minor repairs were done at this point.

Rosedale.—The lockmaster's house was repainted and papered.

BALSAM LAKE TO LAKE SIMCOE.

The following work on the division extending from Balsam lake to Lake Simcoe, a distance of 18 miles, was carried on during the year:—

Balsam Lake.—The buoys on Balsam lake and in the canal between Balsam lake and Kirkfield lift-lock were repainted and replaced.

Kirkfield lift lock.—Considerable dredging was done at the Kirkfield lift lock consisting of rock excavation at a cost of $8,000. The walls in the upper reach of the Kirkfield lift lock were repaired with the new cement gun at a cost of about $2,000. The steel structural work was cleaned and repainted by the Canadian Sand Blast Company, at a cost of about $3,000. The lockmaster and assistant lockmaster's houses were repainted and papered. The steel bridges at Balsover and the Boundary road were repainted. Considerable riprapping was done to the banks along the canal at this point.

RESERVOIR WATERS.—GULL RIVER.

Twelve-mile Lake dam.—A new concrete dam at Twelve-mile Lake, lots 9 and 10, concession 9, Township of Minden. This dam is 132 feet long with two 25 feet sluice ways with reinforced concrete platforms. A natural dam of rock was blasted out and the outlet between Twelve-mile lake and Mountain lake was lowered 4 feet. This dam was built to raise the water 3 feet on Twelve-mile lake giving a control of 7 feet of water on an area of 4,000 acres which it is apparent makes it very valuable as a reservoir.

Trout lake.—A timber dam 95 feet long, 12 feet wide and 9 feet high was built on Trout lake, in the Township of Sherbourne. A fill of earth or embankment 96 feet long, 20 feet wide at toe, and 10 feet wide at the top was built at the end of the timber dam.

Hawk lake.—General repairs were made at the Government house at Hawk lake, and considerable cleaning up and other repairs were done at this point. The slide at dam No. 2, Hawk river, was extended 60 feet.

Redstone dam.—The old wooden dam on the main outlet was gravelled and general repairs were made.

Crooked Lake dam.—Township of Harbourne. A new set of stoplogs was put in at this dam.

BURNT RIVER.

Drag Lake dam.—Erected a new platform on this dam and made general repairs to the dam.

White Lake dam, Township of Galway.—A new concrete dam 250 feet long, 9 feet high with a 14 feet sluice way was built on the site of the old timber dam at this point. A new concrete slide 25 feet long with a concrete road bridge was built over the slide on what is known as White lake road as the slide crosses the road.

Swamp Lake dam Township of Galway.—This dam was gravelled, new stoplogs put in and general repairs made.

Big Bear Lake dam, Township of Glamorgan.—A new platform was erected on the dam.

Grace Lake dam, Township of Monmouth.—Minor repairs were made to the dam at this point.

MISSISSAUGUA CREEK.

Gull Lake dam, Township of Harvey.—A set of new stoplogs were put in at this dam.

Scott's dam.—Considerable repairs were done at this dam.

SQUAW RIVER.

Squaw River dam.—A substantial new timber dam was built on Squaw river, lot 10, concession 4, Township of Cavendish. The dam is 20 feet high, 150 feet long, and will be very valuable as a reservoir.

DEER BAY CREEK.

Cox's Lake dam, Township of Burleigh.—This dam was rebuilt.

Compass Lake dam.—This dam is situated on Deer bay waters, in the Township of Burleigh and was rebuilt.

Crane Lake dam.—The dam was rebuilt and considerable repairs made to the slide.

Eel's Lake dam.—General repairs were made to the dam at this point.

The reservoir dams have proved of splendid assistance as feeders in keeping the water at a uniform flow throughout the entire year, and there were little or no complaints from navigation, lumbermen or power companies.

I am, sir,

Your obedient servant,

J. H. McCLELLAN,
Superintendent.

W. A. Bowden, Esq.,
Chief Engineer,
Department of Railways and Canals,
Ottawa.

ONTARIO—ST. LAWRENCE CANALS.

RESIDENT ENGINEER'S OFFICE,
CORNWALL, April 1, 1912.

SIR,—I have the honour to submit herewith my annual report on the St. Peter's canal for the fiscal year ending March 31, 1912.

The St. Peter's canal is about 2,600 feet long and connects the Bras d'Or lakes with St. Peter's bay on the southeast coast of the Island of Cape Breton. It has one tidal lock 200 feet x 48 feet with 18 feet of water on the sills at low tide. The lift into the lake at low water spring tides is 4 feet and from the lake into St. Peter's bay at high water spring tides is 4 feet, the extreme rise and fall of tide being 8 feet. There is no lift at half tide. The lock is equipped with four pairs of gates.

The canal was opened for navigation on May 1, 1911, and closed January 11, 1912.

During the season of navigation 1,253 vessels were passed through the canal. In addition to these a considerable number of small craft (principally fishing boats measuring from 7 to 10 tons burthen) were passed through. No record was kept of these owing to the fact that they are not registered.

REPAIRS.

Some repairs were made to segment plates and toe rollers of gates by diver.

The circle of the swing bridge was repaired and levelled and necessary repairs were made to the floor.

Eight warping posts were placed in position along the canal.

The whole of the canal works are in such a dilipidated condition that only sufficient repairs are attempted to enable (with care and constant watching) the canal to be operated until the new lock is ready for operation.

IMPROVEMENTS.

Acting under your instructions I went to St. Peter's in September, 1910, and made an inspection of this canal.

I found the whole of the works in a very bad state of repair, lock walls badly worn and crumbled, gates broken and some of them well nigh impossible to swing, lock bottom leaking badly, bridge piers cracked and the wooden swing bridge showing considerable decay.

My report of the condition of the canal together with an estimate of the cost of rebuilding lock and putting the whole canal in a state of efficiency was sent you on September 28, 1910. The work then contemplated would necessitate the closing of the canal for a period of probably 1½ years.

As an alternative I suggested that an entirely new lock be built, and the south or Atlantic end of the canal, which is very tortuous, be straightened.

A survey was made during the season of 1911 with this end in view, and an estimate of cost prepared, after which it was decided by the department to adopt the latter plan.

Plans and specifications were at once prepared and on August 18, 1911, tenders were invited for the construction of a new lock, 300 feet long and 48 feet wide, and a new entrance at the Atlantic end of the canal.

A contract for this work was entered into with Mr. W. H. Weller, of St. Catharines, on November 17, 1911.

Owing to the lateness of the season it was deemed impracticable by the contractor to commence operations before the spring of 1912.

The contractor now has some of his plant on the ground and is making preparations for an immediate start and promises to carry on the work as speedily as possible.

The improvements as designed consist of a new lock, 48 feet wide, 300 feet long, between gates opening in the same direction. The lock will have a rock bottom, and it and the walls (about 400 feet in length on each side of the entrance) will be built of concrete.

I am indebted to Mr. John Morrison, an old resident of St. Peter's, for the following brief history of the canal, which may be of interest.

In 1854, Commissioners were appointed by the Nova Scotia government to construct a canal through the narrow neck of land separating the Bras d'Or lakes from St. Peter's bay on the Atlantic ocean. The work dragged along till Confederation, when it was taken over by the Dominion government, and tenders were at once invited for the completion of the work. The original design was carried out and in 1869 the canal was opened for navigation with a depth of 13 feet of water on the mitre sills of the lock at low tide. The bottom width of the prism of canal was 26 feet.

It was seen at once that the canal was altogether too small to handle the traffic offering, and accordingly in 1872 the government decided to include the canal in their general scheme for the enlargement of the Canadian canals.

Surveys were made in 1872-3, and in 1875 a contract was let for the enlargement of the canal and lock to the following dimensions, viz.: Lock, 200 feet x 48 feet, with 18 feet of water on the mitre sills at low tide and a width in prism of canal of 48 feet.

To permit this work to be done the canal was closed to navigation from June, 1876, to October, 1880.

In December, 1894, the canal was again closed to navigation to permit of the renewal of the lock gates and to make repairs to the lock bottom. The earth slopes throughout the canal were also flattened and the canal was again opened to navigation in November, 1895.

The canal is a very important factor in the general coasting trade of the provinces of Nova Scotia and Prince Edward Island. A large part of the coal shipped from Sydney to the maritime province ports passes through the canal. A considerable trade in limestone is carried on between the quarries in the Bras D'Or lakes and Charlottetown, and a large quantity of farm produce is also carried through the canal from Prince Edward Island to points on the Bras D'Or lakes and Sydney.

At one time there was a large trade in gypsum from the lakes to the United States, but owing to the size of vessels engaged in this trade being limited to the size of the canal it was not profitable, and has of late years practically ceased. Those interested in this trade hope to revive it when the larger lock is ready for use.

I have the honour to be, sir,

Your obedient servant,

C. D. SARGENT,
Resident Engineer,
Ontario-St. Lawrence Canals.

W. A. BOWDEN, Esq., C.E.,
Chief Engineer, Department of Railways and Canals,
Ottawa, Canada.

HUDSON BAY RAILWAY.

WINNIPEG, MAN., April 19, 1912.

Mr. W. A. BOWDEN,
Chief Engineer, Department of Railways and Canals,
Ottawa.

DEAR SIR,—I beg to report as follows on the work on the Hudson Bay railway during the last fiscal year.

The preliminary location has been completed to Port Nelson by Engineer Gordon, and further information obtained relative to alternative routes to Churchill, details of which are given in my report presented to you, dated January 9, 1912.

Since making that report a good crossing of Nelson river has been located at Kettle river, about mileage 320.

A revision of the location has been completed from The Pas to mileage 250, a short distance from the crossing of Nelson river at Manitou rapids, approximately at the first junction point of the Churchill and Nelson routes.

In a few weeks we will have the plans and profiles in condition to let another contract if desired from Thicket Portage to mileage 250, a distance of approximately 65 miles.

The contractors for the first 185 miles have made a start at grading and clearing, and have supplies on the ground now to complete ready for track the first 70 miles.

The contract for the substructure of The Pas bridge was completed by MacKenzie, Mann & Company on March 22.

I regret that the Canada Foundry Company have not made better progress on the superstructure of this bridge. Unless better progress is made from now on it is likely a serious check will be given to the work ahead this fall.

Yours truly,

J. ARMSTRONG,
Chief Engineer.

HUDSON BAY RAILWAY,

WINNIPEG, MAN., January 9, 1912.

W. A. BOWDEN, Esq.,
Chief Engineer,
Department of Railways and Canals,
Ottawa.

DEAR SIR,—I beg to submit the following résumé of the work on the Hudson Bay railway since my published report dated September 8, 1909.

The routes referred to in the above mentioned report have been worked out in detail with revisions, and other suggested routes as well.

The location may now be said to be completed with the exception of some local revisions, some of which are now under way, and also the proposed line from the neighbourhood of Kettle river to Churchill.

The line proposed along the easterly side of Setting lake and the Grass river waters, to rejoin the Churchill line at Big lake about mileage 295 of the Churchill

route, when run proved somewhat of a disappointment, although some improvement over the original line run on the westerly side of these waters. One of the principal drawbacks we found was the heavy bridging encountered at the crossings of the Grass river, the Burntwood river, and the Narrows of Assean lake, these three crossings totalling approximately $750,000. Of the original line somewhat heavy work was met with between miles 120 and 300. On the new line via Thicket Portage this work was lightened somewhat, and reduced from 180 miles to about 130 miles. While the above work was in progress the work on the Nelson route across the same strip of rough country disclosed a much lighter and shorter piece of heavy work, this line confining the heavy work between miles 170 and 235, a distance of about 65 miles, and crossing Nelson river at Manitou rapids. A line was run from this route towards Churchill designed to join about the 240th mile, crossing Nelson river a second time immediately east of Split lake, where a good crossing of Nelson river was obtained about 1,000 feet in length. The bridging on this route although involving two crossings of Nelson river is estimated to cost about $500,000 or $250,000 less than the route to the west of Split lake. The balance of the line has everything in its favour over the western line in curvature, grades, and cost of work. This line has not yet been extended to Churchill, but from reports of Mr. J. B. Tyrrel and other explorers it seems probable this line should be kept further east than the original line along the dotted projection shown on the accompanying map. It seems probable that lighter work will be met with here and grades so much better that they will more than offset the added 15 or 20 miles of distance.

With a given tonnage to handle. the train mileage will probably be less via the long line than via the shorter line owing to the greater tonnage which can be handled per train.

The line from Manitou rapids to Port Nelson was found to be very favourable, the grades, curvature and cost will all be very light. The line was run to the eastern side of Port Nelson. An investigation is under way at the present time looking for the most feasible crossing of the Nelson river in case the north side is chosen. A line will be as easily built on the north side of the river as on the south side with the exception of another crossing of Nelson river and a crossing of Limestone river. It is expected that a report may be made on this portion of the line before the end of March coming. From this crossing of Nelson river at Kettle river a projection has been made to Churchill, but is only to be used in case Port Nelson is chosen as the terminus now, and some years hence a desire to also utilize Churchill may best be served by turning off the Nelson route at the point indicated. In case Churchill is chosen now, undoubtedly the line to follow is the one crossing Nelson river just east of Split lake.

The portion of the line located between The Pas and mile 120 has proven the most difficult portion to give a decisive opinion upon as to the best location. Work on this portion has been continuous and though considerable improvements have been made from time to time they have been entirely of a local nature. I do not think the final location in any place is a mile from the first preliminary line.

In July, 1910, Mr. T. Turnbull was engaged to take a trip to Port Nelson particularly to look into the most suitable site for the proposed town. His report indicates that the north site is the better from a landscape point of view but that from a utility standpoint there is practically no difference. The question to be settled is whether the extra cost of harbour works on the south side is as great or greater than the extra cost to the railway of crossing the Nelson and Limestone rivers to reach the north side. As noted above, information as to this will be available before the end of March.

As to railway terminals, the ground on either side is well suited for such works, both as to area available and situation with regard to docks, &c.

Terminal room can be had at Port Nelson for all the roads in Canada if necessary.

At Fort Churchill the room for terminals at all convenient to possible dock sites is not satisfactory. The west side of the harbour is entirely out of the question and the area on the east side very inadequate if any considerable development is required.

The location as it stands at present leaves the distanee to Port Nelson as 418 miles and to Fort Churchill via the east side of Split lake as 498 miles. It is altogether likely that further changes or revisions may be made from time to time, but will be entirely of a local nature and will not materially affect these distances.

The theoretical air line distance from The Pas to Port Nelson is 412 miles and the chained location distance 418 or 1·5 per cent over the air line.

Comparison of routes.

For the purpose of the comparison of routes it is assumed that traffic for 3,000 trains per year will eventually develop, divided into 1,800 trains running towards the Bay and assuming a lighter tonnage from the Bay the trains have been set at 1,200 making the total of 3,000 trains. The above assumes grades of four-tenths of one per cent both ways. On the first line to Churchill it was found necessary to adopt six-tenths grades against south bound traffic in order to get reasonable work over the 150 miles division next to Churchill, thus reducing the tonnage per train by about one-third, converting the south bound 1,200 trains into 1,600 or an additional 400 trains over 150 miles equal to 60,000 extra train miles per year. On the route via the east side of Split lake the whole 3,000 trains will have to pass over 20 additional miles equal to 60,000 train miles per year leaving the two lines equal as far as train mileage is concerned, but leaving in favour of the eastern route a cheaper line to construct and the generally more satisfactory operating conditions over a line with easier gradients.

Comparing the Churchill route and the Nelson route it can now be taken that grades, curvature and cost of construction per mile will be approximately the same over both routes, and need not be taken into consideration, leaving the question of distance the only one to be considered.

In the report of 1909 attention was called to the problem of building across the 75 miles of tundra into Churchill and the probable difficulty that will be met with during the winter months with snow. No engineers have yet been met with who have had sufficient experience with this class of material to be able to give a reliable opinion on this question, such advice as has been tendered has been given by those who have no knowledge of the subject whatever. Some engineers have been met with who have had experience with very short stretches of similar material and its behaviour was precisely as feared. While short stretches of 1,000 feet or even a mile may be overcome easily, a continuous stretch of 75 miles is a more difficult problem.

The additional distance of eighty miles to Churchill is sufficiently great to make it necessary to add another train division to the line thus directly affecting all the items which go to make up the cost of running a train a mile, viz., track maintenance, repairs to rolling stock, train wages, fuel, cost of maintaining and operating terminals, structures &c., hence it will be necessary in comparing the routes to use the full cost per train mile which would not be necessary if the distance were small enough to be measured in feet or a very few miles.

In the following comparison the cost per train mile used is $1.75 made up of cost of operation put at about $1.30 per train per mile, a charge lower than given by either the Department of Railways and Canals or the Interstate Commerce Commission. To this has been added 45 cents per train mile to include the interest on the cost of construction and equipment. In other words for every train run a mile over the road $1.75 will have to be collected from the public in order to pay all charges. The annual statement of the Canadian Northern railway issued in

December, 1910, gives the operating expenses per freight train mile as $1.50 to which has to be added fixed charges which will make their total charges more than $1.75. The gross earnings per freight train mile are given as $2.59 and for all trains slightly over $2 per train mile. In other words for every train the Canadian Northern ran a mile, more than $2 was collected from the public and in the case of freight $2.59. The figures for the Canadian Pacific railway and other roads are not at hand just now but are not very much different from the above.

Thus you will see that if expenses are held to $1.75 per train mile it probably means the lowest rates in Canada to the public.

On the basis of 3,000 trains per year the following then appears to be the minimum which it will be necessary to collect from the public:—

Churchill Route.

Distance.	Trains.	Train miles.	At $1.75 per train mile.
500 miles..	3,000	1,500,000	$2,625,000
Nelson Route.			
420 miles..	3,000	1,260,000	2,205,000
In favour of Nelson route..			$ 420,000

From the railway end of the problem it is apparent that a minimum of $420,000 per year will be saved to Western Canada by the selection of Port Nelson as a terminus. If the charge of $1.75 per train mile is found too low or the traffic is greater than 3,000 trains per year the difference in favour of the Nelson route will be found still greater.

Another way to illustrate is as follows:—

Cost of operating railway to Churchill per year..	$2,625,000
Assume cost of terminal development at $10,000,000 at 4 per cent..	400,000
Total cost of the route to the public per year..	$3,025,000
Cost of operating railway to Nelson per year..	$2,205,000
Assume cost of terminal development at $20,000,000 at 4 per cent..	800,000
Total cost to the public per year..	$3,005,000

I do not know what the final results of the Naval Service investigation of Port Nelson show, but they must have found a very bad place if the above figures are overcome.

(Signed) JOHN ARMSTRONG.

PART VII

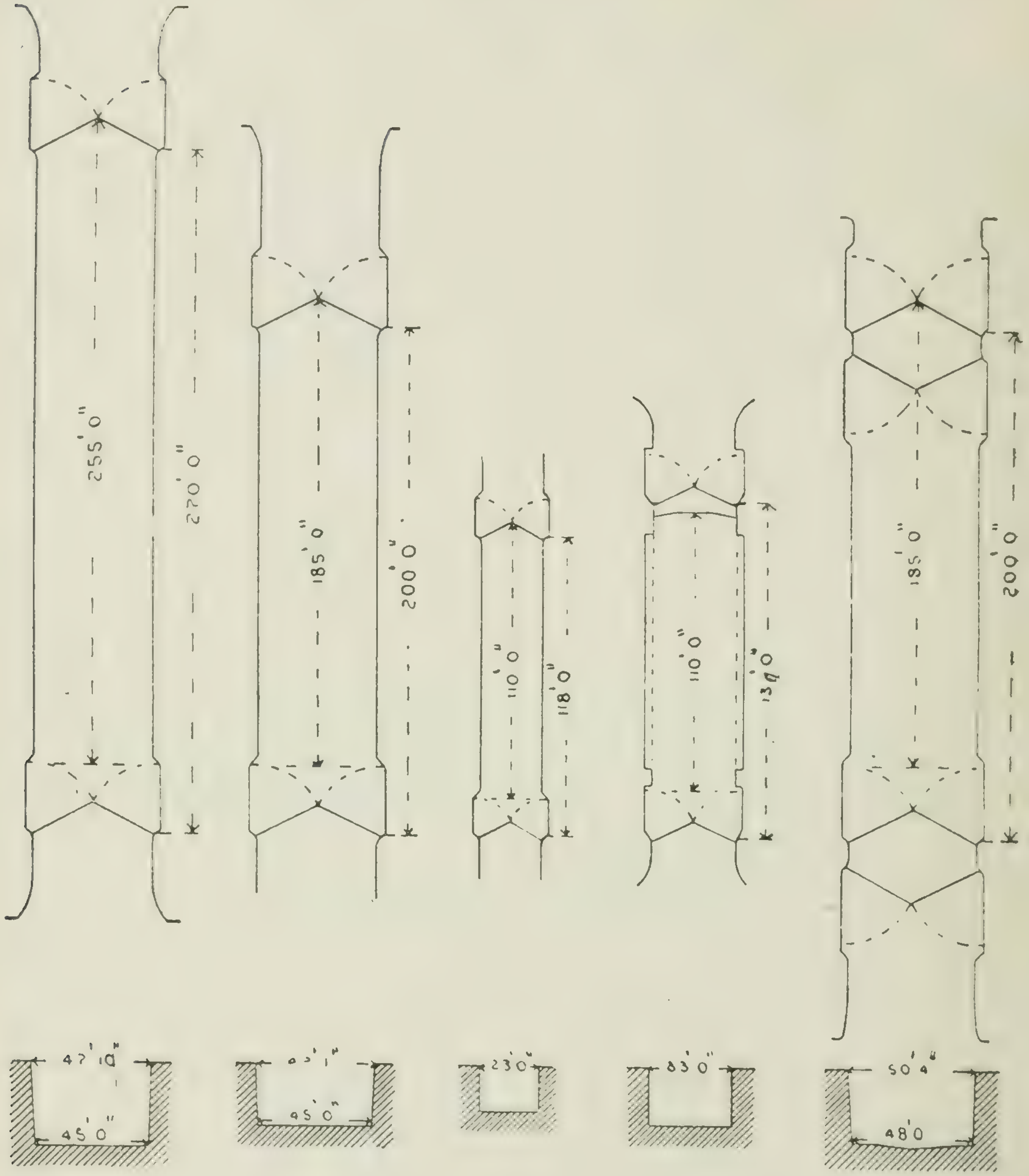
CANALS

Diagrams showing dimensions of smallest lock on each canal, &c.

Dimensions and other features of the several canal works, and description of the intermediate water navigations :

1. **Between Montreal and Port Arthur or Fort William, Lake Superior.**
2. **Montreal, Ottawa and Kingston.**
3. **River Richelieu and Chambly Canal to Lake Champlain.**
4. **Trent Canal.**
5. **St. Peter's Canal.**

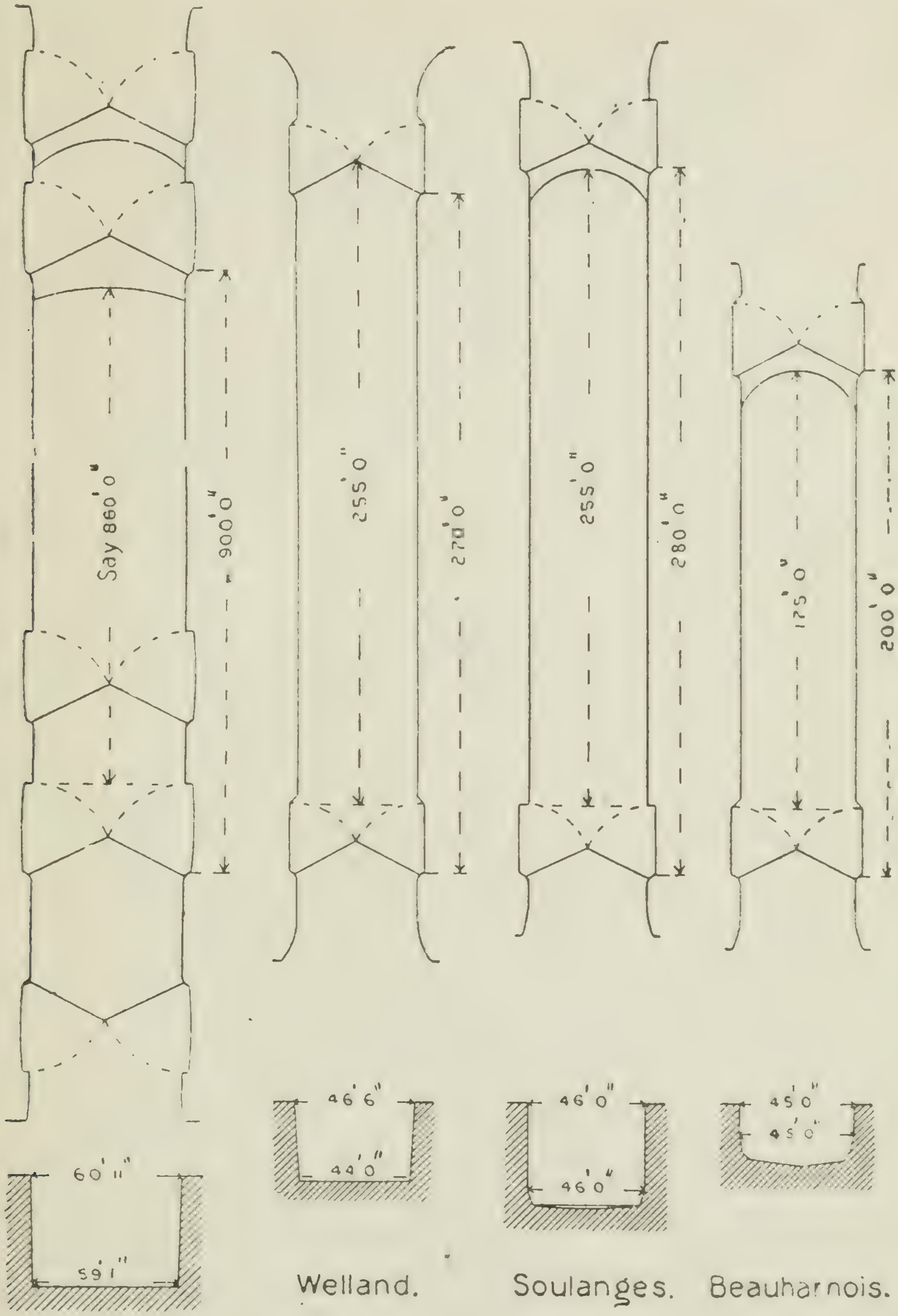
Plans and Sections showing Dimensions of the Smallest Lock on each



Lachine | St Anne, St Ours, Carillon, & Grenville. | Chambly | Rideau | St Peter's

There are no locks on the through route between Lake Superior and

of the Canadian Canal System except the Trent Canal, which is uncompleted.



Montreal of less dimension than those of the Welland Canal Locks.

TRENT CANAL

Hydraulic Lift-Lock at Peterborough
65 Feet Lift

SESSIONAL PAPER No. 20

CANALS

The following statements give in concise form the essential features of the government canal works and the intermediate water navigation.

The canal systems of the Dominion, under government control in connection with lakes and navigable rivers are as follows:—

First.—The through route between Montreal and Port Arthur or Fort William on the west shore of Lake Superior (14 feet minimum depth of water).

	Statute Miles.
1. Lachine canal	8½
Lake St. Louis and River St. Lawrence	16
2. Soulanges canal	14
Lake St. Francis and River St. Lawrence	31
3. Cornwall canal	11¼
River St. Lawrence	5
4. Farrans Point canal	1¼
River St. Lawrence	9½
5. Rapide Plat canal	3⅔
River St. Lawrence	4½
6. Galops canal	7⅓
River St. Lawrence and Lake Ontario	228
7. Welland canal	26¾
Lake Erie, Detroit river, Lake St. Clair, Lake Huron, &c.	574
8. Sault Ste. Marie canal	1¼
Lake Superior to Port Arthur or to Fort William	272
Total	1,214
To Duluth	1,336
Chicago	1,240

Second.—Montreal to International Boundary, near Lake Champlain.

	Statute Miles.
1. St. Lawrence river to Sorel	46
2. Sorel, via Richelieu river, to St. Ours lock	14
3. St. Ours lock	⅛
4. Richelieu river, St. Ours lock, to Chambly canal	32
5. Chambly canal	12
6. Chambly canal to boundary line	23
Total	127⅛

Third.—Montreal to Ottawa.

	Statute Miles.
1. Lachine canal	8½
2. Lake St. Louis	15
St. Anne's lock at outlet of Ottawa river	⅛
Lake of Two Mountains and Ottawa river	27
3. Carillon canal	¾
Ottawa river	6¼
4. Grenville canal	5¾
Ottawa river to Ottawa	56
Total	119⅜

Fourth.—Ottawa to Kingston and Perth.

	Statute Miles.
1. Rideau canal, Ottawa to Kingston..	126¼
Perth Branch,—Rideau lake to Perth..	7
Total..	133¼

Fifth.—Lake Ontario, at Trenton, to Lake Huron.

1. Trent canal,—not completed.

Sixth.—Atlantic Ocean to Bras d'Or Lakes, Cape Breton.

	Statute Miles.
1. St. Peter's canal..	½

RIVER ST. LAWRENCE AND LAKES.

The River St. Lawrence, with the system of canals established on its course above Montreal, and the Lakes Ontario, Erie, St. Clair, Huron and Superior, with connecting canals, afford a course of water communication extending from the Strait of Belle Isle to Port Arthur or Fort William on the west coast of Lake Superior, a distance of 2,217 statute miles. The distance to Duluth is 2,339 miles; the distance to Chicago, 2,243 miles. From the Strait of Belle Isle, at the mouth of the St. Lawrence, to Montreal the distance is 1,003 statute miles. From Quebec to Montreal the distance is 160 miles.

The control of the St. Lawrence ship channel, and the making of improvements thereto, are now under the Department of Marine and Fisheries, whose annual reports give full information as to the history and improvement of the channel. A 30-foot channel between Montreal and Father Point—with a width of 450 feet in the straight portions, and of from 600 to 750 feet in the bends between Montreal and Quebec, and of 1,000 feet everywhere below Quebec—has been practically completed. In 1909 the first work of deepening the ship channel to 35 feet was begun.

By means of channel improvements, Montreal has been placed at the head of ocean navigation, and here the canal systems of the River St. Lawrence begin, overcoming the several rapids by which the river channel upwards is obstructed, and giving access through the St. Lawrence canals, the Welland canal, the Great Lakes and the Sault Ste. Marie canal to the head of Lake Superior.

The difference in level between the point on the St. Lawrence, near Three Rivers, where tidal influence ceases, and Lake Superior is about 600 feet.

The Dominion canals, constructed between Montreal and Lake Superior, are the Lachine, Soulanges, Cornwall, Farrans Point, Rapide Plat, Galops, Murray, Welland and Sault Ste. Marie. Their aggregate length is 74 miles; total lockage (or height directly overcome by locks), 553¼ feet. The number of locks through which a vessel would pass in its passage from Montreal, at the head of ocean navigation, to the head of Lake Superior, is 48. The Soulanges canal takes the place of the Beauharnois canal, abandoned for navigation purposes, and the Murray canal is used only by the coasting vessels on Lake Ontario. It is not a part of the through route.

It is important to note that the enlargement of canals on the main route between Montreal and Lake Erie comprises locks of the following minimum dimensions: length, 270 feet; width, 45 feet; depth of water on sills, 14 feet. The length of vessels to be accommodated is limited to 255 feet. At Farrans Point, in the canal of that name, the lock is 800 feet long. A similar lock is built at Iroquois, on the Galops canal, the object being to pass a full tow at one lockage. The lock at Sault Ste. Marie is 900 feet by 60 feet, with 18 feet 3 inches on the sills at lowest known water level.

Access from Lake Erie to Lake Huron is obtained by way of the Detroit river, Lake St. Clair, and the St. Clair river, which have been deepened to a minimum of 21 feet, principally by the United States government.

Communication between Lakes Huron and Superior is obtained by means of the Canadian Sault Ste. Marie canal, and also by the St. Mary's Falls canals, situated on the United States side of the River St. Mary. Improvements of the United States channels in River St. Mary through Hay lake, east of Sault Ste. Marie, have been carried on for several years past. The dredged areas now total 34 miles in length, with a minimum width of 300 feet, which is increased at angles and other critical points to 1,000 feet. The depth is 20 feet at the mean stage of water. In the year 1903 excavation was commenced to afford 21 feet at the lowest stage of water.

The improvement of Canadian channels from above Montreal to the head of Lake Superior is controlled by the Department of Public Works. Work is now under way to dredge the channel in the River St. Mary to 21·5 feet below L.W.L., the existing minimum depth being 18·75 feet below L.W.L. Existing depths elsewhere between Lakes Erie and Superior give a minimum of 21 feet below L.W.L. The Limekiln channel in the Detroit river has been deepened to 21 feet; and the United States government has opened the Livingstone channel in the same (Detroit river) with a depth of 22 feet.

The improvements at the harbours of Fort William and Port Arthur now under way will give a minimum depth of 25 feet below L.W.L. This depth exists at present over the channels leading to the principal wharfs.

The provisions and maintenance of aids to navigation on all Canadian river and lake channels is controlled by the Department of Marine and Fisheries.

The Sault Ste. Marie, Welland, Cornwall, Soulanges and Lachine canals are well lighted throughout by electricity, and are electrically operated. The Farrans Point canal is lighted with acetylene gas.

Navigation, which is closed by ice during the winter months, opens about the end of April on the Great Lakes and St. Lawrence route. Ice-breaking steamers are now employed to lengthen the navigable season at Lake Superior and Georgian Bay terminals.

STATEMENT OF PRESENT MINIMUM DEPTH OF IMPROVED CHANNELS.

Father Point to Montreal	30 feet.
Montreal to Port Colborne	14 "
Port Colborne to Fort William	18¾ "

LACHINE CANAL.

Length of canal	8½ statute miles.
Number of locks	5
Dimensions of locks	270 feet by 45 feet.
Total rise of lockage	45 feet.
Depth of water on sills, at two locks	18 "
Depth of water on sills, at three locks	14 "
Average width of new canal	150 "

The old lift locks, 200 feet by 45 feet, are still available, with 9 feet of water on mitre sills. The two lower north locks, however have been lengthened to 270 feet, and have 16½ feet of water on the sills.

The canal consists of one channel, with two distinct systems of locks, the old and the enlarged. There are two lock entrances at each end.

The canal extends from the city of Montreal to the town of Lachine, overcoming the St. Louis rapids, the first of the series of rapids which bar the ascent of the River St. Lawrence. They are 986 miles distant from the Strait of Belle Isle.

SOULANGES CANAL.

Length of canal	14 statute miles.
Number of locks—	
Lift	4
Guard	1
Dimensions of locks	280 feet by 45 feet.
Total rise of lockage	84 feet.
Depth of water on sills	15 "
Breadth of canal at bottom	100 "
Breadth of canal at water surface	164 "

The canal extends from Cascade Point to Coteau Landing, overcoming the Cascades rapids, Cedar rapids and Coteau rapids.

From the head of the Lachine to the foot of the Soulanges canal the distance is sixteen miles.

CORNWALL CANAL.

Length of canal	11 statute miles.
Number of locks	6
Guard gates	1
Dimensions of locks	270 feet by 45 feet.
Total rise or lockage	48 feet.
Depth of water on sills	14 "
Breadth of canal at bottom	90 "
Breadth of canal at water surface	154 "

The old lift locks, 200 feet by 55 feet, are also available with nine feet of water on mitre sills.

From the head of the Soulanges to the foot of the Cornwall canal there is a stretch through Lake St. Francis 31 miles, which is navigable for vessels drawing fourteen feet.

The Cornwall canal extends past the Long Sault rapids from the town of Cornwall to Dickinson's Landing.

WILLIAMSBURG CANALS.

The Farrans Point, Rapide Plat and Galops canals are collectively known as the Williamsburg canals.

FARRANS POINT CANAL.

Length of canal	$1\frac{1}{4}$ mile.
Number of locks	1
New lock	800 feet by 50 feet.
Old lock	200 " 45 "
Total rise or lockage	$3\frac{1}{2}$ feet.
Depth of water on sills of new lock	14 "
Depth of water on sills of old lock	9 "
Breadth of canal at bottom	90 "
Breadth of canal at water surface	154 "

From the head of the Cornwall canal to the foot of Farrans Point canal the distance on the River St. Lawrence is five miles. The latter canal enables vessels ascending the river to avoid Farrans Point rapid, passing the full tow at one lockage. Descending vessels run the rapids with ease and safety.

RAPIDE PLAT CANAL.

Length of canal	3⅔	miles.
Number of locks	2	
Dimensions of locks	270	feet by 45 feet.
Total rise or lockage	11½	feet.
Depth of water on sills	14	"
Breadth of canal at bottom	80	"
Breadth of canal at water surface	152	"

The old lift-lock, 200 feet by 45, is also available with nine feet of water on mitre sills.

From the head of Farrans Point canal to the foot of Rapide Plat canal there is a navigable stretch of 9½ miles. The canal was formed to enable vessels ascending the river to pass the rapids at that place. Descending vessels run the rapids safely.

GALOPS CANAL.

Length of canal	7⅓	miles.
Number of locks	3	
Dimensions of locks—		
Lift-lock at foot of canal	800 by 50	feet
Guard-lock at head of canal	270 by 45	"
Lift-lock to pass vessels around Galops rapids only	303 by 45	"
Total rise or lockage	15½	feet.
Depth of water on sills	14	"
Breadth of canal at bottom	80	"
Breadth of canal at surface of water	144	"

From the head of Rapide Plat canal to Iroquois, at the foot of the Galops canal the St. Lawrence is navigable 4½ miles. The canal enables vessels to overcome the rapids at Pointe aux Iroquois, Point Cardinal and the Galops.

MURRAY CANAL.

Length between eastern and western piers	5⅙	miles.
Breadth at bottom	80	feet.
Depth at water surface, low water, Lake Ontario	124	"
Depth below low water, Lake Ontario	11	"
Number of locks	None.	

This canal extends through the Isthmus of Murray, giving connection westward between the head waters of the Bay of Quinté and Lake Ontario, and thus enabling vessels to avoid the open lake navigation.

WELLAND CANAL.

Main line from Port Dalhousie, Lake Ontario, to Port Colborne, Lake Erie.

	Old line.	Enlarged or new line.
Length of canal	27½ miles.	26¾ miles.
Pairs of guard-gates (formerly 3)	2	1
Number of locks—		
Guard	1	1
Lift	26	25
Dimensions	1 (tidal) 230 x 45 1 lock 200 x 45 1 lock 270 x 45 24 locks 150 x 26½	270 feet x 45 feet.
Total rise or lockage	326¾ feet.	326¾ feet.
Depth of water on sills	10¼ "	14 "

WELLAND RIVER BRANCHES.

Length of canal—	
Port Robinson Cut to River Welland	2,622 feet.
From the canal at Welland to the river, via lock at Aqueduct	300 "
Chippewa Cut to River Niagara (6-ft. navigation only)	1,020 "
Number of locks—one at Aqueduct and one at Port Robinson	2
Dimensions of locks	150 by 26½ feet.
Total lockage from the canal at Welland down to River Welland	10 feet.
Depth of water on sills	9 feet 10 inches.

GRAND RIVER FEEDER.

Length of canal	21 miles.
Number of locks	2
Dimensions of locks	1 of 150 by 26½ ft. 1 of 300 by 45 ft. lower. 28 ft. upper.
Total rise or lockage	10 feet.
Depth of water on sills	9 "
Navigable depth of channel	6 " only.

PORT MAITLAND BRANCH.

Length of canal	1¾ miles.
Number of locks	1
Dimensions of locks	185 feet by 45 feet.
Depth of water on sills	7½ feet.
Total rise or lockage	7 "
Navigable depth of channel	6 " only.

The Welland canal has two entrances from Lake Ontario at Port Dalhousie, one for the old, the other for the new canal.

From Port Dalhousie to Allanburg, 11¾ miles, there are two distinct lines of canal in operation, the old line and the enlarged or new line.

From Allanburg to Port Colborne, a distance of 15 miles, there is only one channel, the old canal having been enlarged.

From the head of the Welland canal there is a deep water navigation through Lake Erie, the Detroit river, Lake St. Clair, the St. Clair river, Lake Huron and River St. Mary to the Sault canal, a distance of about 580 miles. From the Sault the distance through Lake Superior to Port Arthur is 274 miles, and to Duluth 397 miles.

SAULT STE. MARIE CANAL.

Length of canal, between the extreme ends of the entrance piers	1⅓₀ miles or 7,472 feet.
Number of locks	1
Dimension of locks	900 feet by 60 feet at water level; width at lock bottom, 59 feet.
Depth of water on sills (at lowest known water level)	18 feet 3 inches.
Total rise or lockage (mean)	19 feet.
Breadth of canal at bottom	141 feet 8 inches.
Breadth at surface of water	150 feet.

This canal has been constructed through St. Mary's island, on the north side of the rapids of the River St. Mary, and, with that river, gives communication on Canadian territory between Lakes Huron and Superior.

MONTREAL, OTTAWA AND KINGSTON.

This route extends from the harbour of Montreal to the port of Kingston, passing through the Lachine canal, the navigation section of the lower River Ottawa, and the Ottawa canals, to the city of Ottawa; thence by the River Rideau and the Rideau canal to Kingston, on Lake Ontario—a total distance of 245⅝ miles.

After leaving the Lachine canal the works constructed to overcome difficulties of navigation are:—

OTTAWA RIVER CANALS.

The Ste. Anne's Lock. Carillon Canal. Grenville Canal.

RIDEAU CANAL.

The total lockage (not including that of the Lachine canal) is 509 feet (345 rise, 164 fall) and the number of locks is 55.

The following table exhibits the intermediate distances from Montreal harbour:—

Sections of Navigation.	Intermediate Distance.	Total Distance from Montreal.
	Miles.	Miles.
The Lachine Canal	8½	
From Lachine to Ste. Anne's Lock	15	23½
Ste. Anne's Lock and piers	⅛	23⅝
Ste. Anne's Lock to Carillon Canal	27	50⅝
The Carillon Canal	¾	51⅜
From Carillon to Grenville Canal	6¼	57⅝
The Grenville Canal	5¾	63⅜
From the Grenville Canal to entrance of Rideau Navigation	56	119⅜
Rideau Navigation ending at Kingston	126¼	245⅝
" Perth Branch, from Rideau Lake to Perth	7	195

STE. ANNE'S LOCK.

	New Lock.	Old Lock.
Length of canal	⅛ mile.	⅛ mile.
Number of locks	1	1
Dimensions of locks	200 x 45 feet.	190 x 45 feet.
Total rise of lockage	3 "	3 "
Depth on sills	9 "	6 "

This work, with guide piers above and below, surmounts the St. Anne's rapids between Ile Perrot and the head of the Island of Montreal, at the outlet of that portion of the River Ottawa which forms the Lake of Two Mountains, 23½ miles from Montreal harbour.

THE CARILLON CANAL.

Length of canal	¾ mile.
Number of locks	2
Dimensions of locks	200 x 45 feet.
Total rise or lockage	16 feet.
Depth of water on sills	9 "
Breadth of canal at bottom	100 "
Breadth of canal at water surface	110 "

This canal overcomes the Carillon rapids.

From Ste. Anne's lock to the foot of the Carillon canal is a navigable stretch of 27 miles, through the Lake of Two Mountains and River Ottawa.

By the construction of the Carillon dam across the River Ottawa the water at that point is raised 9 feet, enabling the river above to be used for navigation.

GRENVILLE CANAL.

Length of canal	5¾ miles.
Number of locks	5
Dimensions of locks	200 x 45 feet.
Total rise or lockage	43¾ feet.
Depth of water on sills	9 "
Breadth of canal at bottom	40 to 50 feet.
Breadth of canal at surface of water	50 to 80 "

This canal, by which the Long Sault rapids are avoided, is about 56 miles below the city of Ottawa, up to which point the River Ottawa affords unimpeded navigation.

RIDEAU NAVIGATION.

The Rideau system connects the River Ottawa at the city of Ottawa with the eastern end of Lake Ontario at Kingston.

Length of navigation		126¼ miles.
Number of locks from Ottawa to Kingston		33 ascending. 14 descending.
Total lockage	457½	292¼ rise and 165¼ fall.
		at low water.
Dimensions of locks		134 x 33 feet.
Depth of water on sills		5 feet.
Navigation depth through the several reaches		5 feet.
Breadth of canal reaches at bottom		54 feet in rock. 60 feet in earth.
Breadth of canal at surface of water		80 feet in earth.

PERTH BRANCH.

Length of canal	7	miles.
Number of locks	2	
Dimensions of locks	134	feet x 33 feet.
Total rise or lockage	26	"
Depth of water on sills	5	" 6 inches.
Length of dam	200	"
Breadth of canal at surface of water	80	"
Breadth of canal at bottom	40	" in rock.
	60	" in clay.

The Perth branch of the Rideau canal affords communication between Beveridge's bay, on Lake Rideau, and the town of Perth.

The summit level of the Rideau system is at upper Lake Rideau, but several of the descending reaches are also supplied by waters which have been made tributary to them. The following description gives the sources of supply:—

From the summit, the route towards Ottawa follows the Rideau river, and that towards Kingston follows the River Cataraqui. The supply of water for the canal is derived from the reserves given in detail below.

These may be divided into three systems, viz.:—

1. The summit level, supplied by the Wolf lake system.

2. The eastern descending level to Ottawa, supplied by the River Tay system, discharging into Lake Rideau.

3. The southwest descending level to Kingston, supplied by the Mud lake system, formerly known as the Devil lake system, discharging into Lake Opinicon.

Lake Opinicon receives the waters of Buck lake and Rock lake.

All these waters on the descending level, supplemented by those of Lake Loughboro', flow to Cranberry lake, which, discharging through Round Tail outlet, forms the River Cataraqui. The river, rendered navigable by dams at various points, affords a line of navigation to Kingston.

RICHELIEU AND LAKE CHAMPLAIN.

This system, commencing at Sorel, at the confluence of the Rivers St. Lawrence and Richelieu, 46 miles below Montreal, extends along the River Richelieu, through

the St. Ours lock to the basin at Chambly; thence, by the Chambly canal, to St. Johns, and up the River Richelieu to Lake Champlain. The distance from Sorel to the boundary line is 81 miles.

At Whitehall, at the southern end of Lake Champlain, connection is obtained by means of the Champlain canal with the River Hudson, by which the city of New York is directly reached.

The following table shows the distances between Sorel and New York:—

Sections of navigation.	Intermediate Distance.	Total Distances.
	Miles.	Miles.
Sorel to St. Ours Lock	14	14
St. Ours Lock to Chambly Canal	32	46
Chambly Canal	12	58
Chambly Canal to boundary line	23	81
Boundary line to Champlain Canal	111	192
Champlain Canal to junction with Erie Canal	66	258
Erie Canal from junction to Albany	7	265
Albany to New York	146	411

ST. OURS LOCK AND DAM.

Length	$\frac{1}{8}$ mile.
Number of locks	1
Dimensions of lock	200 feet by 45 feet.
Total rise or lockage	5 feet.
Depth of water on sills	7 "
Length of dam in western channel	690 "

At St. Ours, 14 miles from Sorel, the River Richelieu is divided by a small island into two channels. The St. Ours lock is in the eastern channel.

There is a navigable depth in the Richelieu of 7 feet between St. Ours lock and Chambly basin, a distance of 32 miles.

CHAMBLY CANAL.

Length of canal	12 miles.	
Number of locks	9	
Dimensions of locks—		
Guard lock No. 1 at St. Johns	122 feet	From $22\frac{1}{2}$ to 24 feet wide.
Lift lock No. 2	124 "	
Lift locks Nos. 3, 4, 5, 6	118 "	
Lifts locks Nos. 7, 8, 9, combined	125 "	
Total rise or lockage	74 "	
Depth of water on sills	$6\frac{1}{2}$ "	
Breadth of canal at bottom	36 "	
Breadth of canal at surface of water	60 "	

This canal succeeds the 32 miles of navigable water between St. Ours lock and Chambly basin. The canal overcomes the rapids between Chambly and St. Johns.

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TRENT CANAL.

The term 'Trent canal' is applied to a series of water stretches, which do not, however, form a connected system of navigation, and which, in the present condition, are efficient only for local use. By various works this local use has been extended, and by others, now in progress and contemplation, this will become a through route between Lake Ontario and Lake Huron.

The series is composed of a chain of lakes and rivers, extending from Trenton, at the mouth of the River Trent, on the Bay of Quinté, Lake Ontario, to Lake Huron.

Many years ago the utilizing of these waters for the purpose of through water communication between Lake Huron and Lake Ontario was projected.

The course, as originally contemplated and modified, is as follows:—

Through the River Trent, Rice lake, the River Otonabee and Lakes Clear, Stony, Lovesick, Deer, Buckhorn, Chemong, Pigeon, Sturgeon and Cameron to Lake Balsam, the summit water, about 155 miles from Trenton; from Lake Balsam by a canal and the River Talbot to Lake Simcoe. The route from Lake Simcoe to Georgian bay, Lake Huron has not yet been determined.

The full execution of the scheme, commenced by the imperial government in 1837, was deferred. By certain works, however, below specified, sections of these waters have been made practicable for navigation, and the whole scheme is now being carried out. A branch of the main route, extending from Sturgeon lake south, affords communication with the town of Lindsay, and, through Lake Scugog, to Port Perry, a distance of approximately 174 miles from Trenton.

The works by which the Trent navigation has been improved to date comprise short canals with locks at Hastings, Peterborough, Peterborough to Lakefield 7 locks, one being a hydraulic lift; Young's Point, Burleigh Falls, Lovesick, Buckhorn, Bobcaygeon, Fenelon Falls, Rosedale, and six locks between Balsam and Simcoe lakes, one being a hydraulic lift; also lock and dam at Lindsay.

Also dams at Healey Falls, Hastings, Peterborough, Peterborough to Lakefield, 6; Young's Point, Burleigh, Lovesick, Buckhorn, Bobcaygeon, Fenelon Falls, Rosedale, and three between Balsam and Simcoe lakes.

Bridges also have been built at many of the locks and at other places.

For convenience the canal may be divided into the following divisions, the lengths being given:—

ONTARIO-RICE LAKE DIVISION.

Embracing the canal and river navigation between Trenton, on the Bay of Quinte, to Rice lake, 56 miles.

The all-river route from Trenton, on the Bay of Quinté, to Rice lake was fully decided upon by the government during the session of 1907, and the work of construction was begun that fall. The improvement is carried out on the principle of damming the river at suitable points by means of dams, and connecting the pools thus created by means of locks and short stretches of canal. The locks on this division will be 175 feet long, 33 feet wide, with 8 feet 4 inches of water on the sills. In the reaches there will be a minimum depth of 9 feet of water. For the purpose of construction, this division of 56 miles has been divided into seven sections, all of which are under contract. Rice lake is 369 feet above low water level of Lake Ontario, which height will be overcome by 18 locks.

PETERBOROUGH-RICE LAKE DIVISION.

Embracing that stretch of river and lake navigation from the lower end of Rice Lake to Peterborough, 32 miles.

This division is navigable with a minimum depth of 6 feet.

At Hastings are a concrete lock, replacing the old masonry lock, and a concrete dam, replacing the old timber structure which formerly existed at that point; these maintain navigation on the Trent River, Rice Lake and the Otonabee River to Peterborough, a distance of about 38 miles.

At Peterborough, 89 miles from Trenton, is a masonry lock and a concrete dam which maintain navigation through Little lake to lock No. 6 of the Peterborough-Lakefield division, a distance of about three-quarters of a mile.

PETERBOROUGH-LAKEFIELD DIVISION.

Embracing that stretch of river and canal navigation from Little lake at Peterborough to Lakefield, 10 miles

Construction completed and canal in operation with a minimum depth of 6 feet for navigation.

From Peterborough to Lakefield, navigation is maintained on the Otonabee river by a series of concrete locks and timber dams as follows:—

Leaving Little lake through lock No. 6, in a distance of about half a mile, the hydraulic lift lock is reached, where there is a lift of 65 feet into a reach which extends to lock No. 5, about five miles from Peterborough, the last mile only of this reach being in the river; from here to Lakefield, locks 5, 4, 3, 2 and 1, with their respective dams, give navigation to Lakefield, about ten miles from Peterborough, or 99 from Trenton, and thence on five miles further to Young's Point.

KAWARTHA LAKES DIVISION.

Embraces that stretch of lake and river navigation from Lakefield to the entrance to the canal on the west shore of Balsam lake—62 miles.

Navigable with a minimum depth of 6 feet. Also in this division, may be included the Lindsay branch which embraces the Scugog lake and river from main channel on Sturgeon lake to Port Perry, the distance being about 30 miles, not included in the total 62 miles, above mentioned. A new lock and dam at Lindsay on this branch has recently been built.

At Young's Point, a masonry lock and timber dam maintain navigation through Clear and Stony lakes to Burleigh, a distance of about nine miles.

At Burleigh, a masonry lock of two lifts and concrete dam maintain navigation through Lovesick lake, about two miles, to Lovesick. A new concrete dam has recently been completed at Burleigh.

At Lovesick, a masonry lock and timber dam maintain navigation through Deer bay for about five miles to Buckhorn.

At Buckhorn, a masonry lock and new concrete dam maintain navigation for about 16½ miles through Buckhorn and Pigeon lakes to Bobcaygeon, 136 miles from Trenton, and also, as branches, maintain navigation from Buckhorn lake through Chemong lake to Bridgeworth, about 8 miles, and in the Pigeon river from Pigeon lake to Omemee, about 10 miles.

At Bobcaygeon, a masonry lock and two dams, one being recently rebuilt of concrete and the other a timber one, maintain navigation through Sturgeon lake and Fenelon river, a distance of about 14½ miles to Fenelon Falls.

At Fenelon Falls is a short canal, a masonry lock of two lifts and a timber dam which maintain navigation across Cameron lakes to Rosedale, a distance of about 3½ miles to a new concrete lock of the same dimensions as those of the Ontario-Rice lake division.

At Rosedale, the new concrete lock and dam maintain navigation on Balsam lake, the summit level of the canal, which extends from Rosedale to the hydraulic

lock at Kirkfield, a distance of twelve miles; half of this distance is through a canal connecting Balsam lake with the lock, which is about 166 miles from Trenton.

SIMCOE-BALSAM LAKE DIVISION.

Extends from Balsam lake to Gamebridge on Lake Simcoe—18.2 miles.

Construction completed and canal in operation with a minimum depth of 6 feet.

At the Kirkfield hydraulic lock is a drop of 50.44 feet from the summit level. From this point to Gamebridge on Lake Simcoe, 179 miles from Trenton, the route consists of canal and river reaches maintained by damming the Talbot river. There are five new concrete locks numbered 1, 2, 3, 4 and 5, with concrete dams at Nos. 1, 2 and 3.

HOLLAND RIVER DIVISION.

This contemplated the canalization of the Holland river between Lake Simcoe and Newmarket, 12.3 miles. It has not been completed, and work on it was discontinued in December 1911.

The following is a list of locks now in use, with their dimensions, in order of location, from Hastings to Gamebridge on Lake Simcoe.

		Length between Hollow Quoins.	Width.	Depth on Sill.	Lift.
		Ft.	Ft.	Ft.	Ft.
1	Lock at Hastings	175	33	8 4 in.	9
1	" at Peterborough	134	33	6	9
1	" No. 6, Peterborough—Lakefield Division	142	33	6	12
1	" at Peterborough, hydraulic lift lock No. 1	140	33	6	65
1	" No. 5, Peterborough—Lakefield Division	142	33	6	14
1	" No. 4, " " "	142	33	6	12
1	" No. 3, " " "	142	33	6	12
1	" No. 2, " " "	142	33	6	10
1	" No. 1, " " "	142	33	6	16
1	" at Young's Point	134	33	6	6
2	" at Burleigh, each 11½ feet	Upper 134 / Lower 150	33	6	23
1	" at Lovesick	134	33	6	4
1	" at Buckhorn	134	33	6	9
1	" at Bobcaygeon	134	33	6	7
2	" at Fenelon Falls, each 12 feet	Upper 134 / Lower 150	33	6	24
1	" at Rosedale	175	33	8 4 in.	4
1	" at Kirkfield, hydraulic lift No. 2	140	33	6	50·44
1	" No. 1, Simcœ—Balsam Lake Division	142	33	6	21
1	" No. 2, " " "	142	33	6	14
1	" No. 3, " " "	142	33	6	14
1	" No. 4, " " "	142	33	6	14
1	" No. 5, " " "	142	33	6	11
24					
1	" at Lindsay, Scugog Branch	142	33	6	6·5

ST. PETER'S CANAL, CAPE BRETON.

Length of canal	About 2,600 feet.
Breadth at water line	55 feet.
Lock	1 tidal lock, 4 pairs of gates.
Dimensions	200 feet by 48 feet.
Depth of water on sills	18 feet at lowest water.
Depth through canal	19 feet.
Extreme rise and fall of tide in St. Peter's bay	7 feet.

This canal connects St. Peter's bay on the southern side of Cape Breton, Nova Scotia, with the Bras d'Or lakes. It crosses an isthmus half a mile in width, and gives access from the Atlantic. A new Atlantic entrance and lock, 300 feet by 48 feet, are now under construction. These will replace the existing lock and entrance.

PART VIII.—MISCELLANEOUS STATEMENTS.

Table of distances, Intercolonial and Prince Edward Island Railways.

INTERCOLONIAL RAILWAY.

Expenses, gross earnings, freight tonnage, profit or loss, and passengers yearly since July 1, 1876.
Earnings, passenger, freight, mails and sundries yearly since July 1, 1876.
Earnings, yearly since July 1, 1876.
Local and through freight, yearly since July 1, 1876.
Local and through passengers, yearly since July 1, 1876.
Coal carried from Nova Scotia colleries, yearly since July 1, 1876.
Grain carried for shipment, yearly since July 1, 1876.
Flour and meal carried, yearly since July 1, 1876.
Grain carried, yearly since July 1, 1876.
Lumber carried, yearly since July 1, 1876.
Live stock carried, yearly since July 1, 1876.
Raw and refined sugar carried yearly, since July 1, 1876.
Fresh and salt fish carried, yearly since July 1, 1876.
Ocean-borne goods carried, yearly since July 1, 1876.

WINDSOR BRANCH.

Earnings, expenses and profits or losses, yearly from 1880.

PRINCE EDWARD ISLAND RAILWAY.

Expenses, earnings, freight and passenger traffic and loss, yearly from 1875.

CANALS.

Statement showing total cost of construction and enlargement from Montreal to Port Arthur.
Statement showing total cost of construction and enlargement from Lachine to Ottawa.
Statement showing total cost of construction and enlargement from Ottawa to Kingston.
Statement showing total cost of construction and enlargement from St. Johns to Sorel.
Statement showing total cost of construction and enlargement from Lake Ontario to Georgian Bay.
Statement showing total cost of construction and enlargement from Atlantic Ocean to Bras d'Or Lakes.
Freight traffic in 1910 and 1911.
Dates of opening and closing of canals for the season of 1911.

INTERCOLONIAL RAILWAY.

The Intercolonial railway touches six Atlantic ocean ports, namely, Pointe du Chêne, Pictou, Halifax, St. John, Sydney and North Sydney, as well as the River St. Lawrence ports of Lévis, opposite Quebec, and Montreal.

The total length of the road operated during the year ended March 31, 1912, was 1,468.15 miles.

The following are the through distances:—

	Miles.
Montreal to Halifax, via Lévis	827
" " St. John, via Lévis	740
" " Sydney, via Lévis	990
" " North Sydney, via Lévis	983

Freight is carried direct via St. Henri, which would reduce each of the above distances by 3 miles.

MAIN LINE AND BRANCHES.

	Miles.
Halifax to Truro	61·87
Dartmouth Branch	12·00
Truro to Moncton	123·77
Moncton to St. John	89·31
Pointe du Chêne Branch	11·98
Moncton to Campbellton	185·37
Campbellton to Ste. Flavie	105·03
Indiantown Branch	21·95
Ste Flavie to Rivière du Loup	83·29
Rivière Ouelle Branch	6·19
Rivière du Loup to Pointe Lévis	115·55
Hadlow to Chaudière Curve	5·63
Chaudière to Ste. Rosalie	115·53
St. Charles Junction to Chaudière Junction	16·73
Nicolet Branch	14·70
Dalhousie Branch	6·28
Pictou to Oxford Junction	69·39
Brown's Point to Stellarton	11·90
Junction near New Glasgow to Pictou Landing	8·18
Pugwash Junction to Pugwash	4·54
Truro to Mulgrave	122·30
Mulgrave to Point Tupper (Ferry)	0·80
Point Tupper to Sydney	91·17
North Sydney Junction to Sydney Mines	7·07
Fredericton to Loggieville	124·80
Ferona Junction to Sunny Brae	12·52
	1,427·85

LEASED.

Length of main line from Pointe Lévis to Hadlow	1·48	
Chaudière Curve to Chaudière	1·19	
Ste. Rosalie Junction to Montreal	37·63	40·30
Total miles		1,468·15

FREIGHT BRANCHES OWNED.

	Miles.
Switch near North street to D.W.T., Halifax	0·85
Halifax Cotton Factory	2·10
Dartmouth Station to end of line	2·12
Sydney Station to wharf	1·06
North Sydney Station to wharf	0·82
Switch near Pictou landing to coal wharf	0·75
Pictou Station to wharf	0·15
Pictou Station to Copper Crown Smelter	0·72
Logan's Tannery siding	0·48
Pugwash Station to wharf	0·07
Sackville Wharf Branch	0·47
Dorchester Wharf Branch	1·00
Moncton Wharf Branch	1·00
Courtney Bay Branch	2·39
St. John water front extension	0·44
St. John Station to Deep Water Wharf	0·28
Newcastle Wharf Branch	1·75
Dalhousie Station to wharf	0·50
Campbellton Wharf Branch	0·43
Rimouski Wharf Branch	2·00
Trois Pistoles Spur	2·38
Rivière du Loup Wharf Branch	4·35
St. Pacôme Spur	1·27
Nicolet Station to wharf	2·08
Carmel Branch, main line to village	1·05
Fort Lawrence Spur	1·18
Wallace Spur	2·00
Petit Rocher Spur to wharf	1·35
	35·04

WINDSOR BRANCH.

This road extends from Windsor Junction, on the Intercolonial railway, to Windsor, N.S., a distance of 32 miles.

PRINCE EDWARD ISLAND RAILWAY.

LENGTH OF LINE.

	Miles.
Souris to Tignish	166
Mount Stewart to Georgetown	24
Charlottetown to Royalty Junction	5
Emerald Junction to Cape Traverse	13
Alberton to Cascumpec wharf	1
Charlottetown to Murray Harbour	52·3
Montague Junction to Montague	6·2
	267·5

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INTERCOLONIAL RAILWAY.

THE following table shows the working expenses, gross earnings, the tonnage of freight and number of passengers carried each year from July 1, 1876, to March 31, 1912.

Year.	Average miles in Operation	Working Expenses.	Gross Earnings.	Profit.	Loss.	Tons of Freight carried.	No. of Passengers carried.
		$ cts.	$ cts.	$ cts.	$ cts.		
1876-77	714	1,661,673 55	1,154,445 33		507,228 22	421,327	613,420
1877-78	714	1,816,273 56	1,378,946 78		432,326 78	552,710	618,957
1878-79	714	2,010,183 22	1,294,009 69		716,083 53	510,861	640,101
1879-80	829	1,603,439 71	1,506,298 48		97,131 23	561,924	581,483
1880-81	840	1,759,851 27	1,760,393 92	542 65		725,777	631,245
1881-82	840	2,069,657 45	2,079,262 66	9,605 18		838,956	779,994
1882-83	840	2,360,373 27	2,370,910 10	17,547 18		970,961	878,600
1883-84	887	2,377,433 62	2,384,414 92	6,981 30		1,009,237	944,636
1884-85	941	2,519,751 56	2.441,203 66		78,547 90	989,986	957,228
1885-86	946	2,583,999 67	2,450,093 88		133,905 79	1,023,788	932,880
1886-87	977	2,922,369 62	2,660,116 93		262,252 69	1,143,020	942,784
1887-88	971	3,366,781 74	2,983,336 05		383,445 69	1,288,823	1,040,163
1888-89	971	3,244,647 73	2,967,801 00		276,847 73	1,218,877	1,136,272
1889-90	971	3,560,575 74	3,012,739 87		847,835 87	1,368,819	1,219,233
1890 91	1,091	3,662,341 94	2,977,395 38		684,946 56	1,304,534	1,298,304
1891-92	1,142	3,439,377 00	2 945,441 97		493,935 03	1,264,575	1,297,732
1892-93	1,142	3,045,317 50	3,065,499 09	20,181 59		1,338,080	1,292,878
1893-94	1,142	2,981,671 98	2,987,516 17	5,838 29		1,342,710	1,301,062
1894-95	1,142	2,936,902 74	2.940,717 95	3,815 21		1,276,816	1,352,664
1895-96	1,142	3,012,827 62	2,957,670 10		55,187 52	1,379,618	1,471,866
1896-97	1.145	2,925,968 67	2.866,028 02		59,940 65	1,296,028	1,501.690
1897-98	1,201	3,327,648 51	3,117,669 85		209,978 66	1,434,576	1,523,444
1898-99	1,301	3,675,686 21	3,738,331 44	62,645 43		1,750,761	1,603,095
1899-1900	1,301	4,431,404 69	4,552,071 71	120,667 02		2,151,208	1,029,754
1900-01	1,301	5,160,404 64	4,972,235 87		488,186 77	2,111,310	2,517,295
1901-02	1,301	5,574,563 30	5,671,385 91	96,822 61		2,385,816	2,186,226
1902-03	1,315	6,196,653 19	6,324,323 72	127,670 53		2,790,737	2,404,230
1903-04	1,321	7,239,982 04	6,339,231 43		900,750 61	2,664 149	2,663,156
1904-05	1,446	8,508,826 75	6,783,522 8		1,725,303 92	2,782,257	2,810,960
1905-06	1,446	7,881,914 36	7,643,829 90	61,915 54		3,156,189	2,737,160
1906-07†	1,448	6,030,171 83	6,248,311 00	218,139 17		2,606,073	2,044,847
1907-08	1,448	9,157,435 53	9,173,558 80	16,123 27		4,134,064	2,789,371
1908-09	*1,447·13	9,328.021 55	8,527,069 46		800,952 09	3,573,972	2,907,232
1909-10	1,447·13	8,645,070 33	9,268,234 99	623,164 66		3,927,240	3,122,347
1910-11	1,455·63	9,595,976 79	9,863,783 40	267,806 61		4,101,400	3,232,895
1911-12	1,468·15	10,591,035 84	10,593,785 84	2,750 00		4,536,599	3,416,553

† The year 1906-7 was nine months only; the Canadian fiscal year having been changed to close on March 31, instead of June 30.

* The railway was remeasured in this year.

INTERCOLONIAL RAILWAY.

STATEMENT of Earnings, yearly, from July 1, 1876, to March 31, 1912.

Year.	Miles in Operation.	Passenger Traffic.	Freight Traffic.	Mails and Sundries.	Total.
		$ cts.	$ cts.	$ cts.	$ cts.
1876-7	714	460.368 15	607,564 99	86,512 21	1,154,443 33
1877-8	714	475,256 82	801,709 82	101,985 07	1,378,946 78
1878-9	714	451,893 29	752,490 85	88,715 55	1,294,009 69
1879-80	829	490,338 66	915,486 50	100,473 32	1,506,298 48
1880-1	840	545,114 48	1,113,872 21	101,407 23	1,760,493 92
1881-2	840	651,299 74	1,303,496 00	124,470 72	2,679,262 66
1882-3	840	741,992 72	1,487,601 98	141,326 40	2,379,910 10
1883-4	887	775,784 77	1,461,390 37	147,240 78	2,383,414 92
1884-5	941	747,285 13	1,542,052 10	151,566 35	2,441,203 66
1885-6	946	765,900 03	1,523,487 72	160,706 13	2,450,093 88
1886-7	977	828,328 28	1,677,971 59	153,817 06	2,660,116 93
1887-8	971	844,448 07	1,932,877 85	166,010 13	2,983,336 95
1888-9	971	906,246 77	1,909,094 44	152,460 09	2,967,801 00
1889-90	971	895,094 53	1,964,646 86	152,998 48	3,012,739 87
1890-1	1,094	962,316 88	1,853,629 88	160,448 62	2,977,395 38
1891-2	1,142	961,427 94	1,803,529 03	180,485 00	2,946,441 97
1892-3	1,142	1,002,912 74	1,868,853 84	184,468 80	3,065,499 09
1893-4	1,142	958,915 13	1,834,126 34	193,762 51	2,987,502 27
1894-5	1,142	963,914 44	1,782,608 54	194,194 97	2,940,717 95
1895-6	1,142	971,426 26	1,788,813 18	197,400 66	2,957,640 10
1896-7	1,145	979,005 57	1,687,050 42	199,472 03	2,866,028 02
1897-8	1,201	1,053,864 64	1,857,740 06	206,065 15	3,117,669 85
1898-9	1,315	1,167,453 16	2,348,096 58	222,781 70	3,738,331 44
1899-1900	1,315	1,404,469 87	2,912,790 52	234,811 32	4,552,071 91
1900-1	1,315	1,607,166 79	3,121,006 15	244,062 93	4,972,235 87
1901-2	1,315	1,770,941 13	3,644,513 42	255,931 36	5,761,385 91
1902-3	1,315	1,927,916 87	4,128,255 00	268,151 75	6,324,323 72
1903-4	1,321	2,021,568 40	4,041,122 48	276,540 55	6,339,231 43
1904-5	1,446	2,105,066 75	4,373,178 75	305,277 53	6,783,522 33
1905-6	1,446	2,297,716 52	5,019,805 53	326,307 85	7,643,829 90
1906-7	1,448	1,952,438 88	4,032,745 00	263,127 12	†6,248,311 05
1907-8	1,448	2,711,416 98	6,054,493 45	407,643 37	9,173,358 80
1908-9	*1,147·13	2,628,218 57	5,502,550 58	396,300 31	8,527,069 46
1909-10	1,447·13	2,765,884 66	6,048,884 18	453,466 15	9,268,234 99
1910-11	1,455·63	2,899,419 82	6,344,595 66	619,767 92	9,863,783 40
1911-12	1,468·15	3,017,304 63	7,008,300 49	568,180 72	10,593,785 84

*As remeasured in this year. † 1906-07, nine months only.

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INTERCOLONIAL RAILWAY.

STATEMENT showing the Number of Tons of Local and Through Freight carried, yearly, from July 1, 1876, to March 31, 1912.

Year.	Miles en Operation.	Local Freight.	Through Freight.	Total.
1876-7	714	The information for these years was destroyed when the general offices in Moncton were burned		421,327
1877-8	714			522,710
1878-9	714			510,861
1879-80	829			561,924
1880-1	840			725,777
1881-2	840	571,784	267,272	838,956
1882-3	840	537,025	443,936	970,961
1883-4	887	584,581	424,658	1,009,237
1884-5	941	506,574	483,352	989,936
1885-6	946	580,076	443,712	1,023,788
1886-7	977	633,455	509,565	1,143,020
1887-8	971	727,599	561,224	1,288,823
1888-9	971	624,436	594,441	1,218,877
1889-90	971	756,696	612,123	1,368,819
1890-1	1,094	797,492	507,042	1,304,534
1891-2	1,142	750,783	513,792	1,264,575
1892-3	1,142	1,030,628	357,452	1,388,080
1893-4	1,142	966,114	376,596	1,342,710
1894-5	1,142	901,374	366,442	1,267,816
1895-6	1,142	1,101,229	368,389	1,379,618
1896-7	1,145	927,167	368,859	1,296,028
1897-8	1,201	1,053,569	381,007	1,434,576
1898-9	1,315	1,351,569	399,192	1,750,761
1899-1900	1,315	1,713,928	437,280	2,151,208
1900-1	1,315	1,633,671	477,639	2,111,310
1901-2	1,315	1,914,551	471,265	2,385,816
1902-3	1,315	2,239,993	550,744	2,790,737
1903-4	1,321	2,123,261	540,888	2,664,149
1904-5	1,446	2,119,528	662,729	2,782,257
1905-6	1,446	2,413,863	742,326	3,156,189
1906-7	1,448	1,996,869	609,204	*2,606,073
1907-8	1,448	3,227,425	906,629	4,134,064
1908-9	†1,447·13	2,742,454	831,518	3,573,972
1909-10	1,447·13	2,958,642	968,598	3,927,240
1910-11	1,455·63	3,085,437	1,015,963	4,101,400
1911-12	1,468·15	3,452,489	1,084,110	4,536,599

* 1906-07, nine months only. † As remeasured in this year.

INTERCOLONIAL RAILWAY.

STATEMENT of the Number of Local and Through Passengers carried, yearly, from July 1, 1876, to March 31, 1912.

Year.	Miles in Operation.	Number of Local Passengers.	Number of Through Passengers.	Total.
1876-7	714	The information for these years was destroyed when the general offices in Moncton were burned		613,420
1877-8	714			619,957
1878-9	714			640,101
1879-80	829			581,483
1880-1	840			631,245
1881-2	840	647,534	132,460	779,994
1882-3	840	728,186	150,414	878,600
1883-4	887	784,715	159,921	944,636
1884-5	941	812,028	145,200	957,228
1885-6	946	784,817	148,063	932,880
1886-7	977	814,032	128,752	942,784
1887-8	971	948,324	91,839	1,040,163
1888-9	971	1,050,592	85,680	1,136,272
1899-90	971	1,112,695	91,531	1,219,233
1890-1	1,094	1,203,814	94,490	1,298,304
1891-2	1,142	1,198,649	99,083	1,297,732
1892-3	1,142	1,188,827	104,051	1,292,878
1893-4	1,142	1,216,027	85,035	1,301,062
1894-5	1,142	1,272,284	80,383	1,352,667
1895-6	1,142	1,386,803	85,063	1,471,866
1896-7	1,145	1,416,631	85,059	1,501,690
1897-8	1,201	1,438,590	89,854	1,523,444
1898-9	1,315	1,504,652	98,443	1,103,095
1899-1900	1,315	1,878,858	112,896	1,791,754
1900-1	1,315	1,905,599	119,696	2,025,295
1901-2	1,315	2,061,196	125,030	2,186,226
1902-3	1,315	2,555,013	149,217	2,404,230
1903-4	1,321	2,447,843	215,313	2,663,156
1904-5	1,446	2,589,928	221,032	2,810,960
1905-6	1,446	2,491,472	245,688	2,737,160
*1906-7	1,448	1,853,126	191,721	2,044,846
1907-8	1,448	2,593,886	195,485	2,789,371
1908-9	†1,447·13	2,656,217	251,020	2,907,237
1909-10	1,447·13	2,873,547	248,777	3,122,324
1910-11	1,455·63	2,968,435	264,460	3,232,895
1911-12	1,468·15	3,126,922	289,631	3,416,553

*1906-07, nine months only. † As remeasured in this year.

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The following table shows the number of Tons of Coal carried over the Intercolonial railway from the Nova Scotia collieries to Ste. Rosalie, Montreal and St. John for points west thereof, and to local stations in each year since July 1, 1876.

Year.	For the West.			To Local Stations.	Total.
	Via Ste. Rosalie.	Via Montreal.	Via St. John.		
1876-7				103,420	103,420
1877-8				97,043	97,043
1878-9		300		112,232	112,532
1879-80		1,097		135,369	136,466
1880-1		6,102	4,022	174,483	184,607
1881-2		18,015	11,779	218,364	248,158
1882-3		12,837	22,206	227,380	262,423
1883-4		32,014	19,532	252,014	293,562
1884-5		133,440	1,773	213,791	349,004
1885-6		171,170	21,150	215,272	407,592
1886-7		192,871	27,536	233,178	453,585
1887-8		183,704	36,228	309,727	529,659
1888-9		160,026	27,923	338,538	526,487
1889-90		164,153	25,126	366,967	554,546
1890-1		113,996	60,213	344,829	498,038
1891-2		35,447	5,918	392,441	433,806
1892-3		136,808	3,775	402,653	543,296
1893-4		102,273	8,028	367,390	478,691
1894-5		67,082	7,865	310,253	385,200
1895-6		53,124	9,681	369,708	432,513
1896-7		38,395	12,305	331,469	382,172
1897-8		9,084	9,796	351,069	369,949
1898-9		4,647	5,399	484,163	494,206
1899-1900		3,495		599,714	603,289
1900-1		136			506,454
1901-2		1,131	5,763	3,640	546,986
1902-3	2,200	7,817	6,775	725,727	742,519
1903-4	2,260	637	513	691,346	694,761
1904-5	800	265	5,022	596,290	602,377
1905-6	7,542	1,625	661	610,444	620,272
*1906-7	1,737	2,808	3,252	624,833	632,630
1907-8	22	183	4,245	1,061,694	1,066,134
1908-9	514	945	4,243	909,050	914,752
1909-10	42	890	1,452	1,003,120	1,005,504
1910-11	90	180	633	983,921	984,824
1911-12	73		303	1,111,157	1,111,533

* 1906-7, nine months only.

TABLE showing the number of Bushels of Grain carried during each year over the Intercolonial railway for shipment since July 1, 1876.

Year.	Bushels.		Total.	Year.	Bushels.		Total.
	Via Chaudière.	Via St. John.			Via Chaudière.	Via St. John.	
1876-7				1894-5	Nli.	Nil.	Nil.
1877-8				1895-6	"	"	"
1878-9				1896-7	"	"	"
1879-80				1897-8	8,000	"	8,000
1880-1				1898-9	30,000	"	30,000
1881-2				1899-1900	13,239	"	13,239
1882-3	31,011		31,011	1900-1	147	"	147
1883-4	73,389		73,389	1901-2	Nil.	"	Nil.
1884-5	300,901		300,901	1902-3	"	"	"
1885-6	389,122		389,122	1903-4	147,438	"	147,438
1886-7	575,880		575,880	1904-5	Nil.	"	Nil.
1887-8	69,021		69,021	1905-6	*170,000		170,000
1888-9	129,725		129,725	1906-7			Néant.
1889-90	502,012		502,012	1907-8			"
1890-1	148,803	59,543	218,337	1908-9			"
1891-2	845,997	519,500	1,265,497	1909-10			"
1892-3	156.306	197,666	352,975	1910-11	*233,839	2,000	235,839
1893-4	Nil.	8,026	8,026	1911-12	†122,734	1,215,574	1,338,308

* Via Montreal. 1906-7, nine months only. † Via Halifax.

TABLE showing the number of Barrels of Flour and Meal carried during each year over the Intercolonial railway since July 1, 1876.

Year.	Barrels.	Year.	Barrels.
1876-7	254,710	1894-5	938,351
1877-8	557,772	1895-6	822,097
1878-9	630,329	1896-7	847,701
1879-80	535,248	1897-8	987,701
1880-1	672,310	1898-9	1,157,250
1881-2	692,095	1899-1900	1,234,077
1882-3	983,916	1900-1	1,292,106
1883-4	817,134	1901-2	1,311,707
1884-5	935,977	1902-3	1,521,540
1885-6	761,127	1903-4	1,607,050
1886-7	763,894	1904-5	1,769,480
1887-8	871,838	1905-6	1,882,630
1888-9	948,514	1906-7	1,531,140
1889-90	1,116,050	1907-8	1,528,620
1890-1	1,013,129	1908-9	1,466,920
1891-2	954,015	1909-10	1,608,170
1892-3	856,913	1910-11	1,696,280
1893-4	944,967	1911-12	1,873,640

1906-7, nine months only.

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TABLE showing the number of Bushels of Grain carried during each year over the Intercolonial railway since July 1, 1876.

Year.	Bushels.	Year.	Bushels.
1876-77	292,852	1894-95	1,036,384
1877-78	331,170	1895-96	1,064,385
1878.79	302.921	1896-97	1,093,499
1879-80	534,021	1897-98	1,551,372
1880-81	565,678	1898-99	2,595,353
1881-82	560,253	1899-1900	2,720,453
1892-83	1,195,601	1900-01	3,535,364
1883-84	654,673	1901-02	2,959,761
1884-85	734,902	1902-03	3,392,252
1885-86	849,800	1903-04	2,788,772
1886-87	1,018,395	1904-05	3,317,910
1887-88	1,219,035	1905-06	2,924,226
1888-89	1,256,158	1906-07	2,231,864
1889-90	2,610,202	1907-08	4.567,245
1890-91	2,890,921	1908-09	4.727,268
1891-92	3,776,677	1909-10	7,074,042
1892-93	1,514,619	1910-11	5,080,848
1893-94	1,304,684	1911-12	5,206,440

1906–07, nine months only.

TABLE showing the quantity of lumber in feet carried during each year over the Intercolonial railway since July 1, 1876.

Year.	Feet.	Year.	Feet.
1876-77	50,096,474	1894-95	202,247,269
1877-78	56,626,547	1895-96	226,332,715
1878-79	55.626,696	1896-97	243,355,725
1879-80	55,462,654	1897-98	354,093,816
1880-81	72,841,388	1898-99	306,554,031
1881-82	78,356,418	1899-1900	379,350,074
1882-83	104,633,417	1900-01	396,858,964
1883-84	131,120,948	1901-02	428,051,029
1884-85	138,493,675	1902-03	459,231,589
1885-86	117,186,512	1903-04	465,379,803
1886-87	161,801,763	1904-05	518,434,310
1887-88	197,755,272	1905-06	572,878,600
1888-89	199,507,777	1906-07	452,602,703
1889-90	210,886,071	1907-08	754,759,383
1890-91	184,188,324	1908-09	571,395,101
1991-92	175,474,340	1909-10	677,805,611
1892-93	181,211,013	1910-11	647,327,499
1893-94	200,507,949	1911-12	656,418,588

1906–07, nine months only.

TABLE showing the number of Live Stock carried during each year over the Intercolonial railway since July 1, 1876.

Year.	Number.	Year.	Number.
1876-77	34,414	1894-95	72,106
1877-78	46,498	1895-96	64,051
1878-79	47,584	1896-97	72,082
1879-80	70,990	1897-98	89,301
1880-81	61,574	1898-99	109,821
1881-82	73,479	1899-1900	92,813
1882-83	68,338	1900-01	95,923
1883-84	60,090	1901-02	98,495
1884-85	70,785	1902-03	127,060
1885-86	74,498	1903-04	113,006
1886-87	82,896	1904-05	110,670
1887-88	98,302	1905-06	106,589
1888-89	85,960	1906-07	97,381
1889-90	80,771	1907-08	99,824
1890-91	95,529	1908-09	104,165
1891-92	87,889	1909-10	106,712
1892-93	93,369	1910-11	113,976
1893-94	79,203	1911-12	115,189

1906-07, nine months.

TABLE showing the number of Tons of Ocean-borne goods to and from Europe carried over the Intercolonial railway during each year since July 1, 1876.

Year.	Via Ste. Rosalie and from the West.	Via Montreal to and from the West.	Via St. John to and from the West.	To and from Local Stations.	Total.
1876-77					
1877-78	14,949		3,405		18,354
1878-79	21,628		2,643		24,271
1879-80	21,073		4,952		26,025
1880-81	15,454		3,334		18,788
1881-82	21,607		4,168		25,775
1882-83	24,875		7,911		32,786
1883-84	19,696		6,533		26,229
1884-85	22,787		8,405		31,192
1885-86	13,464		8,216		21,680
1886-87	16,923		9,811		26,734
1887-88	41,864		8,878		50,742
1888-89	17,340		11,481		28,821
1889-90	9,895		11,730		21,625
1890-91	9,923		10,764		20,687
1891-92	9,716		23,835		33,571
1892-93	7,295		12,319		19,714
1893-94	3,023	204	13,455		16,682
1894-95	6,749	213	10,399		17,361
1895-96	3,767	314	16,748		20,829
1896-97	2,654	263	17,239		20,156
1897-98	5,950	1,637	18,633		26,220
1898-99	2,462	243	31,555		34,263
1899-1900	6,880	307	37,108		39,794
1900-01	322	7,780	1,142	155,514	163,838
1901-02	1,106	11,925	1,528	172,733	183,147
1902-03	817	21,377	1,194	124,695	138,631
1903-04	2,079	15,325	2,994	146,070	174,520
1904-05	284	17,217	3,683	85,853	105,149
1905-06	2,026	15,922	5,337	128,462	153,042
1906-07	1,384	16,652	436	110,447	128,219
1907-08	2,440	16,652	519	134,541	154,052
1908-09	2,487	23,402	649	119,913	146,451
1909-10	2,367	21,064	5,818	131,273	160,522
1910-11	7,220	27,607	6,927	130,776	172,530
1911-12	9,911	63,544	8,777	213,579	295,811

1906-07, nine months.

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TABLE showing the number of Tons of Raw and Refined Sugar carried over the Intercolonial railway during each year since July, 1, 1876.

Year.	Raw Sugar.					Refined Sugar.				
	Via Ste. Rosalie.	To Montreal for the West.	To St. John for the West.	To Local Stations	Total.	To Ste. Rosalie for the West.	To Montreal for the West.	To St. John for the West.	To Local Stations	Total.
		Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1876-77		340			340					
1877-78		186			186					
1878-79		1,041			1,041					
1879-80		12,220			12,220					
1880-81		13,872			13,862		4,022		2,902	6,924
1881-82		13,256		1,290	15,546		7,146		3,607	10,753
1882-83		9,465		508	9,973		11,126		5,497	16,623
1883-84		13,778		3,068	16,846		14,543		7,265	21,808
1884-85		10,381		3,661	14,042		18,024		8,445	26,469
1885-86		4,394		3,988	8,392		7,674		5,858	13,518
1886-87		20,450		8,500	28,950		15,044		8,395	23,439
1887-88		14,320		14,085	28,405		21,641		7,133	28,774
1888-89		24,358		7,160	31,518		12,955		11,120	24,075
1889-90		6,390		8,913	16,303		6,778		6,125	12,903
1890-91		5,088	4,670	8,215	17,973		10,130	468	5,096	16,594
1891-92		7,142	3,960	10,535	21,637		12,633	7,647	12,414	32,721
1892-93				10,137	10,137		8,327	6,456	7,840	22,623
1893-94				6,775	6,775		17,729	6,967	8,885	33,581
1894-95				10,342	10,342		13,351	15,819	4,695	33,865
1895-96				9,824	9,824		15,138	13,734	11.309	40,181
1896-97				4,925	4,925		5,694	8,069	6,957	20,720
1897-98							6,624	8,821	10,989	26,534
1898-99							8,138	2,183	15,833	26,164
1899-1900		96			96		9,795	257	19,655	29,907
1900-01		489			489	403	14,791	12	10,615	25,821
1901-02		90		11,553	11,643	3,101	9,831	861	18,839	29,632
1902 03		194		17,137	17,331	3,183	5,763	1,636	20,529	31,111
1903-04	357	875		7,495	8,727	6,013	8,628	879	29,400	44,920
1904-05	602	600	78	1,495	15,684	1,446	7,107	224	23,937	31,764
1905-06		715	68	9,308	10,091	4,235	12.268	176	24,780	41,459
1906-07		394		14,671	15,065	1,998	5,898	2,374	13,927	24,197
1907-08		912		4,371	5,283	5,280	10,555	723	21,073	37,631
1908-09	6	1,705		6,817	8,528	5,095	8,906	979	21,527	36,507
1909-10	309	2,000		12,203	14.512	6,402	9,217	1,051	23,224	39,894
1910-11	532	1,293		24,166	25,991	6,326	9,368	947	25,026	41,667
1911-12	1,096	2,558		12,057	15,711	8,242	9,691	1,519	21,870	41,322

1906-07, nine months only.

TABLE showing the number of Tons of Fresh and Salt Fish carried over the Intercolonial railway during each year since 1876.

Year.	Fresh Fish.					Salt Fish.				
	Via Ste. Rosalie.	Via Montreal.	Via St. John	To Local Stations	Total.	Via Ste. Rosalie.	Via Montreal	Via St. John	To Local Stations	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1876-77	.....	530	921	527	1,978	.....	551	1,848	802	3,201
1877-78	.....	596	1,015	474	2,085	.....	898	1,644	805	3,346
1878-79	.....	471	1,336	817	2,624	.....	988	1,038	1,048	2,974
1879-80	.....	519	1,462	453	2,334	.....	1,612	2,238	959	4,809
1880-81	.....	498	1,879	920	3,297	.....	1,418	937	1,051	4,406
1881-82	.....	475	1,919	967	3,951	.....	4,031	1,066	2,487	7,584
1882-82	.....	542	384	393	1,319	.....	3,229	759	1,354	5,412
1883-84	.....	838	1,682	412	2,932	.....	1,322	1,143	1,224	3,689
1884-85	.....	1,062	1,885	484	3,431	.....	3,563	3,600	1,596	8,759
1885-86	.....	1,669	1,655	902	4,216	.....	1,680	3,047	3,376	7,103
1886-87	.....	1,278	1,572	2,008	4,859	.....	3,236	569	1,747	5,552
1887-88	.....	1,533	1,477	1,031	4,041	.....	2,617	470	1,099	4,193
1888-89	.....	2,474	2,000	1,870	63,44	.....	3,070	7,746	2,994	13,810
1889-90	.....	2,335	1,787	2,111	6,223	.....	2,449	847	3,288	6,584
1890-91	.....	2,029	2,788	1,848	6,665	.....	1,953	1,917	3,236	7,106
1891-92	.....	1,367	1,746	547	3,660	.....	1,946	928	1,889	4,763
1892-93	.....	1,683	1,875	3,340	6,898	.....	[3,262	1,811	2,176	7,249
1893-94	.....	1,959	2,192	2,224	6,375	.....	2,921	1,814	2,962	7,697
1894-95	.....	2,006	3,726	1,160	6,892	.....	2,075	1,849	5,285	10,209
1895-96	.....	1,966	3,059	1,316	6,344	.....	1,863	1,087	2,791	5,741
1896-97	.....	3,307	3,115	1,286	7,708	.....	2,158	1,176	2,536	5,889
1897-98	.....	3,575	3,703	1,052	8,330	.....	1,729	1,066	2,210	5,005
1868-99	.....	1,210	2,070	3,305	5,583	.....	1,651	1,198	3,625	5,474
1890-1000	.....	2,547	2,706	3,686	8,939	.....	2,421	1,563	2,658	6,643
1900-01	37	2,009	3,207	4,125	9,393	860	3,416	1,346	4,643	9,768
1901-02	219	3,013	4,373	5,477	13,082	283	3,250	1,413	5,196	10,042
1902-03	149	2,269	3,040	4,842	10,289	493	2,808	1,615	6,579	11,495
1904-05	779	1,939	3,588	5,002	11,068	225	2,359	564	5,848	8,996
1905-06	284	2,748	2,439	7,706	13,177	683	2,740	346	6,994	10,763
1906-07	320	2,882	3,712	7,400	14,314	307	3,159	416	6,348	10,227
1907-08	199	3,288	1,353	6,224	11,064	661	2,856	1,976	7,034	12,527
1908-09	312	2,965	2,794	6,946	13,017	668	4,078	1,632	4,866	11,244
1909-10	547	3,965	2,616	6,525	14,110	697	3,759	806	6,706	14,868
1910-11	1,216	4,300	2,733	6,161	14,110	893	3,590	1,993	9,130	15,546
1911-12	1,476	4,213	1,917	6,686	14,292	4,250	4,060	425	10,108	18,843

1906-07, nine months only.

WINDSOR BRANCH.

This road is operated by the Dominion Atlantic Railway Company (formerly the Windsor and Annapolis Railway Company), under a lease which covers also running powers over the Intercolonial railway between Windsor Junction and Halifax. The company retains two-thirds of the gross earnings, and the government receives one-third of the gross earnings, for maintaining the way and works.

Year.	Miles in operation.	One-third gross earnings.	Proportion credited to line Windsor Junction to Halifax.	Proportion credited to the Windsor Branch.	Maintenance expenses.	Profit.	Loss.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1880-81	32	28,434 29	7,217 76	21,216 53	20,502 26	714 27	
1881-82	32	28,461 07	7,407 88	21,052 19	13,090 55	7,953 64	
1882-83	32	31,199 77	8,095 88	24,113 89	23,103 93	1,009 96	
1883-84	32	30,428 39	7,409 46	23,018 93	22,140 86	878 07	
1884-85	32	32,246 30	7,794 95	24,451 35	18,751 96	5,699 39	
1885-86	32	31,185 63	7,527 52	23,658 11	19,229 49	4,428 62	
1886-87	32	33,564 58	8,237 00	25,327 58	26,042 33		714 75
1886-87	32	32,242 85	6,689 30	24,553 55	24,040 33	513 22	
1887-88	32	37,313 43	8,941 32	28,372 11	20,856 50	7,515 61	
1889-90	32	39,544 19	9,381 73	30,162 46	18,982 82	11,179 64	
1890-91	32	39,519 56	9,284 48	38,508 35	28,931 71	1,303 42	
1891-92	32	42,391 23	9,382 38	30,235 13	19,514 37	13,994 48	
1892-93	32	43,901 28	9,585 17	34,316 11	16,889 95	17,426 16	
1893-94	32	41,834 70	8,859 23	32,975 47	17,645 09	15,330 38	
1894-95	32	50,703 84	11,626 20	39,077 64	14,640 07	24,437 57	
1895-96	32	47,456 74	10,894 91	36,561 83	16,476 46	20,985 37	
1896-97	32	54,208 81	13,605 58	40,603 23	10,821 04	29,782 19	
1897-98	32	48,892 21	11,665 57	37,226 64	18,181 09	14,045 01	
1898-99	32	56,314 51	13,840 48	42,474 04	12,873 06	29,600 94	
1899-1900	32	62,266 61	14,925 18	47,351 43	12,891 56	34,459 87	
1900-01	32	62,523 20	15,261 31	47,261 89	16,862 66	30,399 23	
1901-02	32	65,315 38	15,710 79	49,604 59	16,376 27	33,228 32	
1902-03	32	56,417 38	13,856 57	42,560 81	17,843 19	24,717 62	
1903-04	32	72,708 54	19,074 49	53,634 05	24,281 09	29,352 96	
1904-05	32	66,798 46	16,759 79	50,038 67	26,863 16	23,175 51	
1905-06	32	65,936 66	16,484 16	49,452 50	17,485 97	31,966 53	
1906-07	32	61,597 30	16,156 78	45,440 52	15,425 32	30,015 20	
1907-08	32	76,471 58	20,041 17	56,430 41	37,912 11	18,518 20	
1908-09	32	75,781 80	19,750 47	56,031 33	36,234 55	19,796 78	
1909-10	32	81,861 73	21,207 75	60,653 98	23,549 90	37,104 08	
1910-11	32	64,781 89	16,590 46	48,191 43	17,797 98	30,393 45	
1911-12	32	99,996 10	26,819 50	73,176 60	33,854 05	39,322 55	

1906-07, nine months only.

PRINCE EDWARD ISLAND RAILWAY.

The following table shows the working expenses, the gross and net earnings, the tons of freight and number of persons carried each year since June 30, 1875, when the road was first opened for traffic :—

Year.	Miles in operation.	Working expenses.	Gross earnings.	Loss.	Tons of freight carried.	No. of passengers carried.
		$ cts.	$ cts.	$ cts.		
1576-76	199	214,930 43	118,060 96	96,869 47	28,358	93,964
1887-77	199	228,595 25	130,664 92	97,930 33	41,039	93,478
1877-78	199	221,599 46	135,899 60	85,699 89	38,668	111,428
1978-79	199	223,313 12	125,855 99	97,457 21	38,923	105,046
1879-80	199	164,640 55	113,851 11	50,789 44	37,208	90,533
1880-81	199	228,259 97	137,267 54	90,922 43	48,315	118,436
1881-82	199	252,808 41	146,170 42	106,637 99	51,920	117,162
1882-83	199	236,428 13	144,504 12	91,924 01	51,841	118,988
1883-84	211	211,207 01	158,588 06	52,618 95	57,346	130,423
1884-85	211	216,744 34	155,584 36	61,159 98	57,913	120,374
1885-86	211	204,237 37	155,303 37	48,934 00	63,589	103,067
1886-87	211	229,639 95	158,365 62	71,276 33	59,603	131,246
1887-88	211	247,559 44	171,369 56	76,189 89	55,682	152,780
1888-89	211	266,485 85	160,971 78	105,524 07	52,604	133,099
1889-90	211	257,990 08	174,258 05	83,732 03	59,511	145,508
1890-91	211	289,706 38	157,442 69	132,263 69	51,065	139,389
1891-92	211	226,422 17	162,690 42	63,731 75	56,718	132,111
1893-94	211	226,891 06	158,533 83	68,857 23	53,577	123,727
1894-95	211	232,105 19	149,654 71	83,250 41	48,325	125,089
1895-96	211	225,138 56	146,476 54	78,662 02	46,395	122,586
1896-97	211	240,489 90	153,443 13	87,046 77	52,151	131,498
1897-98	211	231,418 74	158,950 61	72,468 13	57,539	156,510
1898-99	211	218,053 01	165,021 03	53,040 98	57,968	129,667
1899-1900	211	220,931 81	174,738 73	46,193 08	62,227	147,471
1900-01	211	261,766 24	193,833 48	67,883 76	73,696	157,793
1901-02	210	270,159 97	197,999 97	72,160 00	74,381	184,748
1902-03	209	269,737 82	217,714 24	41,923 58	80,582	205,265
1903-04	209	335,695 44	234,390 03	101,305 41	86,286	224,517
1904-05	209	370,464 44	217,330 61	153,133 83	75,969	235,194
1905-06	261	294,253 16	257,270 57	36,982 59	87,162	256,092
1906-07	267	282,148 50	215,534 97	67,713 53	67,144	232,371
1907-08	267	399,947 79	304,579 83	95,367 96	97,250	317,828
1908-09	267·5	400,330 00	311,319 63	69,010 78	106,090	332,758
1909-10	267·5	427,283 73	319,074 74	108,208 99	105,741	251,038
1910-11	267·5	424,104 00	337,419 55	86,684 45	108,263	356,761
1911-12	267·5	449,962 91	367,203 39	82,759 52	120,218	388,076

1906-07, nine months only.

SESSIONAL PAPER No. 20

CANALS.

STATEMENT showing the total cost of construction of the individual Dominion canal works and connecting waters, up to March 31, 1912.

Route from Montreal to Lake Superior.

—	Original Construction.	Enlargement of Canals.	Improvements to St. Lawrence River and Lakes.	Totals.
	$ cts.	$ cts.	$ cts.	$ cts.
Lachine Canal	2,589,532 85	10,352,146 14		12,941,678 99
Lake St. Louis			298,176 11	298,176 11
Soulanges Canal	7,515,623 18			7,515,623 18
Beauharnois Canal	1,636,690 26			1,636,690 26
Lake St. Francis			75,906 71	75,906 71
Cornwall Canal	1,945,624 73	5,297,179 48		7,242,804 21
Williamsburg Canal	1,320,655 54	13,896 26		1,334,551 80
Farrans Point Canal		877,090 57		877,090 57
Rapide Plat Canal		2,158,242 00		2,158,242 00
Galops Canal		6,118,927 32		6,118,927 32
Galops Rapids			1,039,895 65	1,039,895 65
St. Lawrence River and reaches			711,238 93	711,238 93
North Channel			1,718,778 83	1,718,778 83
Murray Canal	1,248,946 71			1,248,946 71
Welland Canal	7,693,824 03	21,209,415 83		28,903,239 86
Sault Ste. Marie Canal	4,941,557 07			4,941,557 07
Totals	28,892,454 37	46,026,897 60	3,843,996 23	78,763,348 20

Route from Lachine to Ottawa.

—	Original Construction.	Enlargement.	Total.
	$ cts.	$ cts.	$ cts.
Ste. Anne's Lock	134,456 51	1,035,759 12	1,170,215 63
Carillon and Grenville Canals	63,053 64	4,119,039 32	4,182,092 96
Culbute Canal (superseded)	382,776 46		382,776 46
Total	580,286 61	5,154,798 44	5,735,085 05

Construction by the Imperial Government is not included. Records relating to same were kept in Ordnance Office, Montreal, and were destroyed by fire in 1852.

Route from Ottawa to Kingston.

—	Original Construction.	Enlargement.	Total.
	$ cts.	$ cts.	$ cts.
Rideau Canal	4,085,889 21		4,085,889 21
Tay Canal	489,599 23		489,599 23
Total	4,575,488 44		4,575,488 44

Route from St. Johns, P.Q., to Sorel.

—	Original Construction.	Enlargement.	Total.
	$ cts.	$ cts.	$ cts.
Chambly Canal	637,214 66	79,255 76	716,470 42
St. Ours Lock	121,843 93	4,306 28	126,150 21
Total	759,058 59	83,562 04	842,620 63

Route from Lake Ontario to Georgian Bay.

—	Original Construction.	Enlargement.	Total.
	$ cts.	$ cts.	$ cts.
Trent Canal	11,302,045 89	.....	11,302,045 89
Total	11,302,045 89	.....	11,302,045 89

Route from Atlantic Ocean to Bras d'Or Lakes.

—	Original Construction.	Enlargement.	Total.
	$ cts.	$ cts.	$ cts.
St. Peter's Canal—Cape Breton	248,762 84	399,784 30	648,547 14
Total	248,762 84	399,784 30	648,547 14

SESSIONAL PAPER No. 20

COMPARATIVE STATEMENT of Tons of Freight which passed through the canals in seasons of 1910 and 1911.

Name of Canal.	Season of 1911.	Season of 1910.	Number of trips of vessels.	
			Season of 1911.	Season of 1910.
	Tons.	Tons.		
Sault Ste. Marie	30,951,709	36,395,687	6,781	7,972
Welland	2,537,629	2,326,290	2,480	2,544
St. Lawrence	3,105,708	2,760,752	9,923	10,220
Chambly	599,829	669,299	4,008	4,219
St. Peter's	75,298	85,951	1,260	1,470
Murray	163,457	177,941	1,440	1,308
Ottawa	320,071	385,261	2,413	2,601
Rideau	172,227	134,881	3,062	2,815
Trent	57,290	46,263	4,165	3,442
St. Andrew's*	47,135	8,283	423	202
Total	38,030,353	42,990,608	35,955	36,799

* This is a lock and dam on the Red River, between Winnipeg and Lake Winnipeg, built and operated by the Department of Public Works.

TABLE showing the dates of opening and closing of the canals for the season of 1911.

		Navigation Opened 1911.	Navigation Closed 1911.
Lachine		May 1	December 3
Soulanges		" 1	" 3
Grenville		" 1	November 30
Carillon		" 1	" 30
Ste. Anne's		April 28	" 30
Chambly		May 1	" 30
St. Ours		April 26	" 28
Cornwall		May 1	December 6
Williamsburg	Farrans Point	" 1	" 7
	Rapide Plat	" 1	" 7
	Galops	" 1	" 7
Murray		April 19	" 4
Welland		" 15	" 15
Sault Ste. Marie		" 22	" 13
Rideau	At Ottawa	May 7	November 29
	At Kingston Mills	" 1	" 24
Trent	Lake Simcoe to Fenelon Falls	" 15	" 1
	Fenelon Falls to Lakefield	April 20	" 21
	Lakefield to Peterborough	May 1	" 11
	Peterborough to Healey Falls	April 15	December 16
St. Peter's		May 1	January 11, 1912.

PART IX

ACTS AUTHORIZING RAILWAY SUBSIDIES

IN FORCE, UP TO AUGUST 1, 1912

RAILWAY SUBSIDIES

The following are the several railway subsidy acts passed since and including the year 1908. They are effective up to August 1, 1912.

1908

ACT 7-8 EDWARD VII., CAP. 63, 1908.

(Assented to 20th July, 1908.)

1. The Governor in Council may grant a subsidy of $3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated) which shall not cost more on the average than $15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway, not exceeding the mileage hereinafter stated, which shall cost more on the average than $15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of $3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of $15,000 per mile, such subsidy not exceeding in the whole the sum of $6,400 per mile:—

1. To the Kettle River Valley Railway Company, for a line of railway from a point at or near Grand Forks to a point fifty miles up the North Fork and East or West Fork of the North Fork of Kettle river, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 39; not exceeding 50 miles.
2. For a line of railway from Owen Sound, in the province of Ontario, to Meaford, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 18; not exceeding 30 miles.
3. For a line of railway from Sharbot Lake or Bathurst station, in the province of Ontario, or between these points, via Lanark village, to Carleton Place, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 7; not exceeding 41 miles.
4. To the Nipigon Railway Company, for the following lines of railway:—
   (*a*) from a point at or near Nipigon Station on the line of the Canadian Pacific railway to Nipigon lake; not exceeding 30 miles;

(*b*) from a point on Nipigon bay of Lake Superior to a point on the west of Lake Helen on the line of the Nipigon railway; not exceeding 3½ miles;

(*c*) from a point on the line of the Nipigon railway at or near the crossing of the Fraser river to a point on Lake Jesse, by way of Cameron's Falls; not exceeding 1½ miles;

(*d*) from a point on the north shore of Lake Nipigon northerly; not exceeding 45 miles.

the said subsidies to the said lines being granted in lieu of the subsidies granted by chapter 43 of 1906, section 1, item 10; not exceeding in all 80 miles.

5. To the Manitoulin and North Shore Railway Company (or to the Canada Central Railway Company, with the consent of the Manitoulin and North Shore Railway Company, and subject to the approval of the Governor in Council), for the following lines of railway:—

(*a*) from a point on the said line of railway, between Little Current and Sudbury, westerly towards the Algoma Central and Hudson Bay railway; not exceeding 100 miles;

(*b*) from Little Current thence crossing the Canadian Pacific railway, at or near Stanley,and thence to Sudbury; not exceeding 64 miles.

(*c*) from a point at or near Sudbury, not exceeding 30 miles;

the said subsidies being granted in lieu of the subsidies granted by chapter 43 of 1906, section 1, item 1; not exceeding in all 194 miles.

6. To the Ontario, Northern and Timagami Railway Company, for a line of railway from a point at or near Sturgeon Falls, in a northwesterly direction, to a point on the westerly shore of Lake Timagami, in the district of Nipissing, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 28; not exceeding 50 miles.

7. For a line of railway from a point at or near Baptiste,easterly to a point at or near Renfrew, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 24; not exceeding 75 miles.

8. To the Bracebridge and Trading Lake Railway Company, for a railway from Bracebridge, in Muskoka, to a point at or near Baysville, Ontario, in lieu of the subsidy granted by chapter 34 of 1904, section 2, item 1, for 15 miles; not exceeding 16 miles.

9. To the Quebec and Lake St. John Railway Company, for a line of railway from Roberval westward towards James Bay, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 12; not exceeding 100 miles.

10. To the Matane and Gaspé Railway Company, for a line of railway from a point at or near Ste. Flavie, on the Intercolonial railway, to Matane, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 44, for 30 miles; not exceeding 38 miles.

11. To the Canadian Northern Quebec Railway Company, for a line of railway from a point at or near Arundel to a point in the municipality of the united townships of Preston and Hartwell, not exceeding 30 miles; and for a line of railway connecting its Montfort and Gatineau line with the main line from St. Jerome, not exceeding 15·2 miles; in lieu of the subsidies granted to the Great Northern railway of Canada by chapter 43 of 1906, section 1, item 36; not exceeding in all 45·2 miles.

12. To the Canadian Northern Quebec Railway Company, for a line of railway from, or near, Garneau Junction to Quebec, with a branch to or towards the Quebec bridge, in lieu of the subsidy granted to the Great Northern railway of Canada by chapter 43 of 1906, section 1, item 37, for 70 miles; not exceeding 83 miles.

13. To the Atlantic, Quebec and Western Railway Company, for a line of railway from a point at or near Causapascal, on the Intercolonial railway, to Edmundston, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 9, for a line between the points above mentioned; not exceeding 160 miles.

14. For a line of railway from Yamaska to a point in the county of Lotbiniere, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 12, not exceeding 70 miles; and for a line of railway from Mount Johnson to St. Gregoire Station, in lieu of the subsidy granted to the United Counties Railway Company by chapter 7 of 1899, section 2, item 16, for one mile, not exceeding 1½ miles; and not exceeding in all 71½ miles.
15. To the International Railway Company of New Brunswick, for a line of railway from the western end of the twenty miles of its railway, as already constructed from Campbellton, to a point on the St. John river between Grand Falls and Edmundston, in lieu of the subsidies granted by chapter 57 of 1903, section 2, items 14 and 59 respectively; not exceeding 90 miles.
16. For a line of railway from Brazil lake, on the Dominion Atlantic railway, to Kemptville, Nova Scotia, in lieu of the subsidy granted by chapter 8 of 1900, section 2, item 30; not exceeding 11 miles.
17. To the Inverness Railway and Coal Company, for a line of railway from Cheticamp to a point on the line already built between Broad Cove and Point Tupper, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 24, for 37 miles; not exceeding 37 miles.
18. To the Margaree Coal and Railway Company, for a line of railway from a point at or near Orangedale, on the Intercolonial railway, thence via the east side of Lake Ainslie and Ste. Rosa, to Chimney Corner Cove, not exceeding 46 miles; and from a point on the Intercolonial railway between Orangedale and Point Tupper to Caribou Cove on Inhabitant's bay or river, not exceeding 4 miles; in lieu of the subsidy granted by chapter 40 of 1907, section 1, item 21, for 38 miles; not exceeding in all 50 miles.
19. To the Lotbinière and Megantic Railway Company, for a line of railway to extend its railway southerly from a point at or near Lyster, in Megantic county, to or towards a point at or near Lime Ridge, in the township of Dudswell, not exceeding 50 miles; and for a line of railway from a point on its line in the township of Inverness to a point at or near the bridge over the St. Lawrence at or near Quebec, not exceeding 30 miles; in lieu of the subsidies granted by chapter 43 of 1906, section 1, items 3 and 20, respectively; not exceeding in all 80 miles.
20. To the Cape Breton Railway Company, Limited, for a line of railway from Port Hawkesbury or Point Tupper, on the Strait of Canso, Nova Scotia, to St. Peter's, in lieu of the subsidy granted by chapter 7 of 1899, section 2, item 6, for 30 miles; not exceeding 31 miles.
21. For a line of railway from a point on the Intercolonial railway at or near Dartmouth, in the county of Halifax, to a point at or near Deans Settlement, in the county of Halifax, in lieu in part of the subsidy granted by chapter 43 of 1906, section 1, item 5; not exceeding 80 miles.
22. For a line of railway from a point at or near Deans Settlement, in the county of Halifax, to a point at or near Melrose, in the county of Guysborough, in lieu in part of the subsidy granted by chapter 43 of 1906, section 1, item 5; not exceeding 52 miles.
23. For a line of railway from a point at or near New Glasgow, in the county of Pictou, to a point at or near Melrose, in the county of Guysborough, and from the said point at or near Melrose to Guysborough, in the county of Guysborough, with branch line to Country Harbour in the county of Guysborough, in lieu in part of the subsidy granted by chapter 43 of 1906, section 1, item 5; not exceeding in all 116 miles.
24. To the Ha Ha Bay Railway Company, for a line of railway from a point at or near Jonquières village to Baie de Ha Ha via Laterrière village, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 33, for 20 miles; not exceeding 24 miles.

25. To the Quebec and New Brunswick Railway Company, for a line of railway from Chaudiere Junction to a point at or near the International Boundary, in lieu of the subsidy granted by chapter 7 of 1901, section 2, item 2, for 45 miles; not exceeding 62 miles.
26. For a line of railway from a point at or near Ste. Agathe des Monts Station towards the township of Howard, in the county of Argenteuil, passing near Lake St. Joseph and St. Mary in a southerly direction, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 38; not exceeding 15 miles.
27. For a line of railway from Tusket Wedge to a point on the Halifax Southwestern railway at or near Riverdale Station; not exceeding 8 miles.
28. To the Halifax and Southwestern Railway Company, for a line of railway from Lunenburg to Bridgewater, via Upper Lahave; not exceeding 12 miles.
29. To the Erie, London and Tilsonburg Railway Company, for a line of railway from Port Burwell to London; not exceeding 35 miles.
30. For a line of railway from a point at or near Centrevllle to Aylesford, or Kingston, or Middleton, on the line of the Dominion Atlantic railway; not exceeding 35 miles.
31. For a line of railway from a point on the Canadian Pacific railway at or near Plaster Rock to Riley Brook; not exceeding 28 miles.
32. To the North Shore Railway Company, Limited (formerly the Beersville Coal and Railway Company), for a line of railway extending its present line from Beersville to Brown's Landing, not exceeding 7 miles; and for a branch line of railway from its main line to Mount Carlyle, not exceeding 2½ miles; not exceeding in all 9½ miles.
33. To the York and Carleton Railway Company, for a line of railway from its present terminus to a point on the National Transcontinental railway; not exceeding 9 miles.
34. To the Vancouver and Lulu Island Railway Company, for a line of railway from Eburn, on its main line, to New Westminster; not exceeding 9·65 miles.
35. To the Esquimalt and Nanaimo Railway Company, for a line of railway from a point near French creek to the village of Sandwich, not exceeding 41 miles; and for a line of railway from the village of Sandwich to Campbell river, not exceeding 38 miles; not exceeding in all 79 miles.
36. For a line of railway from Macleod, via Cardston, towards a point on the International Boundary west of range 21; not exceeding 45 miles.
37. To the Southern Central Pacific Railway Company, for a line of railway from a point at or near Cowley, in Alberta, to a point on Highwood river; not exceeding 50 miles.
38. For a line of railway from a point at or near the town of Red Deer to a point on the North Saskatchewan river at or near Rocky Mountain House; not exceeding 70 miles.
39. To the Canadian Pacific Railway Company, for a line of railway from Winnipeg Beach northerly to Gimli, not exceeding 9½ miles; and for a line from Gimli to Riverton, not exceeding 25 miles; not exceeding in all 34½ miles.
40. To the Canadian Pacific Railway Company, for a line of railway from Moosejaw; in a northwesterly direction; not exceeding 123 miles.
41. To the Eastern Townships Railway Company, for a line of railway from the Intercolonial railway at St. Leonard's Junction to Dudswell; not exceeding 36 miles.
42. To the Quebec, Montreal and Southern Railway Company, for a line of railway from Noyan Junction to the International boundary, not exceeding 8 miles; and for a line of railway from St. Lambert to St. Constant, not exceeding 15 miles; not exceeding in all 23 miles.
43. To the Quebec and Lake St. John Railway Company, for the following lines of railway:—

(*a*) from Valcartier Station to St. Catherine; not exceeding 3·8 miles.
(*b*) from Valcartier Station towards Gosford; not exceeding 5½ miles.
(*c*) from the end of the 35th mile of the branch to La Tuque, on the River St. Maurice to La Tuque Falls; not exceeding 5 miles;
(*d*) from La Tuque Falls to the mouth of the River Croche, not exceeding 5 miles;
(*e*) from a point on La Tuque branch to the steamboat landing near La Tuque; not exceeding 1·6 miles; not exceeding in all 20·9 miles;

44. To the Quebec and Lake St. John Railway Company, for a line of railway from Herbertville to St. Joseph d'Alma; not exceeding 10 miles.
45. To the St. Maurice Valley Railway Company, for a line of railway from Three Rivers to Grand Mere; not exceeding 28 miles.
46. For a line of railway from a point on the main line of the Great Northern Railway at or near St. Jerome to Charlemange (Bout de l'Ile); not exceeding 22 miles.
47. To the North Eastern Railway Company, for a line of railway from a point east of Lake Temiskaming, at or near Ville Marie, easterly; not exceeding 25 miles.
48. To the Canadian Northern Quebec Railway Company, for a line of railway from Montreal to Hawkesbury; not exceeding 65 miles.
49. For a line of railway from Montreal to a point on the National Transcontinental railway; not exceeding 200 miles.
50. To the Quebec Central Railway Company, for an extension of its line of railway from St. George to or towards St. Justine; not exceeding 30 miles.
51. To the Maritime Coal, Railway and Power Company, for a line of railway from Chignecto to a point on the Northumberland Straits, not exceeding 25 miles; and from Joggins Mines to a point on the Bay of Fundy, not exceeding 1 mile; not exceeding in all 26 miles.
52. For a line of railway from St. Peter's, in the county of Richmond, by the south shore of Bras d'Or lake to Sydney; not exceeding 60 miles.
53. To the Nipissing Central Railway Company, for a line of railway from a point on the Temiskaming and Northern Ontario railway, at or near the town of New Liskeard, to a point in the township of Guigues, in the Province of Quebec; not exceeding 13 miles.
54. To the Vancouver Island and Eastern Railway Company, for a line of railway from a point on the Esquimalt and Nanaimo railway, near Campbell river towards Fort George, on the line of the Grand Trunk Pacific railway; not exceeding 100 miles.
55. To the Vancouver, Westminster and Yukon Railway Company, for a line of railway from Vancouver towards Fort George, on the line of the Grand Trunk Pacific railway; not exceeding 100 miles.
56. For a line of railway around Death Rapid, British Columbia; not exceeding 4 miles.
57. To the Pacific Northern and Omineca Railway Company, for a line of railway from Kittimat to the Telkwa river; not exceeding 110 miles.
58. For a line of railway from Nicola to a point at or near Penticton; not exceeding 100 miles.
59. For a line of railway from Carmi to Penticton; not exceeding 50 miles.
60. To the St. Mary and Western Ontario Railway Company, for a line of railway from Woodstock to Exeter; not exceeding 45 miles.
61. To the Algoma Central and Hudson Bay Railway Company, for a line of railway from a point on the Canadian Pacific railway northward towards the National Transcontinental railway; not exceeding 50 miles.
62. To the Grand Trunk Pacific Railway Company, for branch lines of railway from the line of the National Transcontinental railway to Port Arthur and Fort William; not exceeding 220 miles.

63. To the Lac Seul, Rat Portage and Keewatin Railway Company, for a line of railway from a point at or near Kenora to the line of the National Transcontinental railway; not exceeding 18 miles.
64. To the Burk's Falls and French River Railway Company, for a line of railway from Burk's Falls to French river; not exceeding 85 miles.
65. To the Thessalon and Northern Railway Company, for a line of railway from Thessalon, northerly; not exceeding 4 miles.
66. To the Canadian Northern Ontario Railway Company, for a line of railway from Sudbury Junction to Hutton Mines; not exceeding 30 miles.
67. To the Esquimalt and Nanaimo Railway Company, for a line of railway from Cowichan bay to Cowichan lake; not exceeding 54 miles.
68. To the Canadian Northern Quebec Railway Company, for a line of railway from Hawkesbury to Ottawa; not exceeding 60 miles.
69. For the following lines of railway:—
    (*a*) from Westfield to St. John, not exceeding 14 miles;
    (*b*) from Gagetown to Fredericton, not exceeding 40 miles;
    (*c*) from a point between Centreville and Woodstock to a point at or near Grand Falls, not exceeding 55 miles.
70. To the Little Nation River Railway Company, for a line of railway from Papineauville on the Canadian Pacific railway towards Lake Nominingue; not exceeding 30 miles.
71. To the L'Avenir and Melbourne Railway Company, for a line of railway from Melbourne to Drummondville; not exceeding 28 miles.
72. To the Quebec and Lake St. John Railway Company, for a line of railway from Chicoutimi south or southeast; not exceeding 5 miles.

2. The Governor in Council may grant the subsidies hereinafter mentioned towards the construction and completion of the bridges also hereinafter mentioned, that is to say:—

1. Towards the construction and completion of a railway bridge and approaches over the Nicolet river at Nicolet, in lieu of the subsidy granted by chapter 40 of 1907, section 2, $15,000.
2. To the Canadian Pacific Railway Company (lessees of the Calgary and Edmonton Railway Company), towards the construction and completion of a bridge over the Saskatchewan river connecting Strathcona and Edmonton, 15 per cent upon the amount expended thereon; not exceeding $100,000.
3. To the Quebec, Montreal and Southern Railway Company, towards the construction and completion of the following railway bridges:—
    (*a*) bridge across the Gentilly river, $15,000;
    (*b*) bridge across the Becancour river, $30,000;
    (*c*) bridge across the Richelieu river, $30,000;
4. To the Atlantic, Quebec and Western Railway Company, towards the construction and completion of the 26 railway bridges on its line of railway from Paspebiac to Gaspé, payable upon the completion of the said line of railway between the said points, $250,000.
5. To the Interprovincial Railway Bridge Company of New Brunswick, towards the construction and completion of a railway bridge over the Restigouche river from Campbellton to Mission Point, not exceeding $160,000.
6. To the Vancouver, Westminster and Yukon Railway Company, towards the construction and completion of a railway bridge across Burrard Inlet.

3. In this Act, unless the context otherwise requires, the expression 'cost' means the actual, necessary and reasonable cost, and shall include the amount expended upon any bridge, up to and not exceeding $25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of

equipping the railway, nor the cost of terminals, nor the cost of right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the Chief Engineer of the Department of Railways and Canals, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of the construction of such railway.

4. The subsidies hereby authorized towards the construction of any railway or bridge shall be payable out of the Consolidated Revenue Fund of Canada, and may, unless otherwise expressly provided in this Act, at the option of the Governor in Council, on the report of the Minister of Railways and Canals, be paid as follows:—

(*a*) Upon the completion of the work subsidized; or

(*b*) By instalments, on the completion of each ten-mile section of the railway, in the proportion which the cost of such completed section bears to that of the whole work undertaken; or

(*c*) Upon the progress estimates on the certificate of the Chief Engineer of the Department of Railways and Canals that in his opinion, having regard to the whole work undertaken and the aid granted, the progress made justifies the payment of a sum not less than thirty thousand dollars; or

(d) With respect to *(b)* and *(c)*, part one way, part the other.

5. The subsidies hereinbefore authorized to be granted to companies named shall if granted by the Governor in Council, be granted to such companies respectively: the other subsidies may be granted to such companies as establish to the satisfaction of the Governor in Council their ability to construct and complete the said railway and bridges respectively; all the lines and the bridge for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August, 1908, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by the Governor in Council, and shall also be constructed according to descriptions, conditions and specifications approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in each case in a contract between the Company and the said Minister, which contract the Minister, with the approval of the Governor in Council, is hereby empowered to make. The location also of such subsidized lines and bridges shall be subject to the approval of the Governor in Council.

6. The granting of such subsidies and the receipt thereof by the respective companies shall be subject to the condition that the Board of Railway Commissioners for Canada may at all times provide and secure to other companies such running powers, traffic arrangements and other rights as will afford to all railways connecting with the railway and bridges so subsidized reasonable and proper facilities in exercising such running power, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways; and the said Board shall have absolute control, at all times, over the rates and tolls to be levied and taken by any of the companies, or upon any of the railways and bridges hereby subsidized: Provided always that any decision of the said Board made under this section may be at any time varied, changed or rescinded by the Governor in Council, as he deems just and proper.

7. Every company receiving a subsidy under this Act, its successors and assigns, and any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the Government of Canada transportation for men, supplies, materials and mails over the portion of the

lines in respect of which it has received such subsidy, and, whenever required, shall furnish mail cars properly equipped for such mail service; and such transportation and service shall be performed at such rates as are agreed upon between the Minister of the department of the Government for which such service is being performed, and the company performing it, and, in case of disagreement, then at such rates as are approved by the Board of Railway Commissioners for Canada; and in or towards payment for such charges the Government of Canada shall be credited by the company with a sum equal to three per cent per annum on the amount of the subsidy received by the company under this Act.

8. As respects all railways and bridges for which subsidies are granted by this Act, the company at any time owning or operating any of the railways or bridges shall when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed by him, all books, accounts and vouchers showing the cost of constructing the railway or bridge, the cost of operating it, and the earnings thereof.

9. The Governor in Council may make it a condition of the grant of the subsidies herein provide that the company shall lay the railway with new steel rails and fastenings made in Canada and shall purchase all materials and supplies required for the construction of the railways and bridges, and the rolling stock for the first equipment of the railway, from Canadian producers, if such rails, fastenings, materials, supplies and equipment are procurable in Canada of suitable quality and upon terms as favourable as elsewhere, of which the Minister of Railways and Canals shall be the judge.

10. Whenever a contract has been duly entered into with a company for the construction of any line of railway hereby subsidized, the Minister of Railways and Canals, at the request of the Company, and upon the report of the Chief Engineer of the Department of Railways and Canals, and his certificate that he has made careful examination of the surveys, plans and profile of the whole line so contracted for and has duly considered the physical characteristics of the country to be traversed and the means of transport available for construction, naming the reasonable and probable cost of such construction, may, with the authorization of the Governor in Council, enter into a supplementary agreement, fixing definitely the maximum amount of the subsidy to be paid, based upon the said certificate of the Chief Engineer, and providing that the company shall be credited to be paid, as the minimum, the ordinary subsidy of $3,200 per mile, together with sixty per cent of the difference between the amount so fixed and the said $3,200 per mile, if any; and the balance, forty per cent, shall be paid only on completion of the whole work subsidized, and in so far as the actual cost, as finally determined by the Governor in Council upon the recommendation of the Minister of Railways and Canals, and upon the report and certificate of the said Chief Engineer, entitles the company thereto: Provided always—

(a) that the estimated cost, as certified, is not less on the average than $18,000 per mile for the whole mileage subsidized;

(b) that no payment shall be made except upon a certificate of the Chief Engineer that the work done is up to the standard specified in the companies' contract;

(c) that in no cases shall the subsidy exceed the sum of $6,400 per mile.

1909

ACT 8-9 EDWARD VII., CHAP. 35.

(Assented to May 19, 1909).

1. Paragraph 6 of section 2 of chapter 63 of the statutes of 1908 is amended by adding at the end thereof the figures '$200,000.'

1910

ACT 9-10 EDWARD VII., CHAP. 51.

(Assented to May 4, 1910).

1. The Governor in Council may grant a subsidy of $3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated) which shall not cost more on the average than $15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway, not exceeding the mileage hereinafter stated, which shall cost more on the average than $15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of $3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of $15,000 per mile, such subsidy not exceeding in the whole the sum of $6,400 per mile:—

1. For a line of railway from Tusket Wedge to a point on the Halifax and Southwestern railway at or near Riverdale station, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 27; not exceeding 8 miles.

2. To the Halifax and Southwestern Railway Company, for a line of railway from Lunenburg to Bridgewater via Upper La Have, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 28; not exceeding 12 miles.

3. To the Inverness Railway and Coal Company, for a line of railway from Chetican camp to a point on the line already built between Broad Cove and Point Tupper, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 17; not exceeding 37 miles.

4. To the Margaree Coal and Railway Company, for a line of railway from a point at or near Orangedale, on the Intercolonial railway, thence by the east side of Lake Ainslee and Ste. Rosa, to Chimney Corner Cove, not exceeding 46 miles; and for a line of railway from a point on the Intercolonial railway between Orangedale and Point Tupper to Caribou Cove on Inhabitants bay or river, not exceeding 4 miles; in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 18; not exceeding in all 50 miles.

5. For a line of railway from a point on the Dominion Atlantic railway to the Government pier or wharf at Canning, in lieu of the subsidy granted by chapter 40 of 1907, section 1, item 7; not exceeding one mile.

6. For a line of railway from Brazil lake, on the Dominion Atlantic railway to Kemptville, Nova Scotia, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 16; not exceeding 11 miles.

7. To the Dominion Atlantic Railway Company, for a line of railway from Centreville on the Dominion Atlantic railway, westerly to Weston, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 30; not exceeding 15 miles.

8. For a line of railway from a point on the Intercolonial railway at or near Dartmouth, in the county of Halifax, to a point at or near Deans Settlement, in the county of Halifax, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 21; not exceeding 80 miles.

9. For a line of railway from a point at or near Deans Settlement, in the county of Halifax, to a point at or near Melrose, in the county of Guysborough, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 22; not exceeding 52 miles.

10. For a line of railway from a point at or near New Glasgow, in the county of Pictou, to a point at or near Melrose, in the county of Guysborough, and from the

said point at or near Melrose to Guysborough, in the county of Guysborough, with a branch line to Country Harbour, in the county of Guysborough, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 23; not exceeding in all 116 miles.

11. To the International Railway Company of New Brunswick, for 3½ miles of its railway, being the distance which the subsidy granted by chapter 63 of 1908, section 1, item 15, is short of covering.

12. For a line of railway from Grand Falls to St. John, New Brunswick, in lieu of the subsidies granted by chapter 40 of 1907, section 1, items 2, 3 and 10, respectively, and in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 69; not exceeding 228 miles.

13. For a line of railway from Connors, at the terminus of the Temiscouata railway to a point on the boundry line between New Brunswick and Quebec, at the foot of Beau lake, in lieu of the subsidy granted by chapter 40 of 1907, section 1, item 25; not exceeding 18 miles.

14. To the York and Carleton Railway Company, for a line of railway from its present terminus to a point on the National Transcontinental railway, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 33; not exceeding 9 miles.

15. For a line of railway from a point on the Canadian Pacific railway at or near Plaster Rock to Riley Brook, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 31; not exceeding 28 miles.

16. To the Atlantic, Quebec and Western Railway Company, for a line of railway from Paspebiac to Gaspé, as near the shore as practicable, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 9, for a line between the points above mentioned; not exceeding 102 miles.

17. To the Canadian Northern Quebec Railway Company, for a line of railway from a point at or near Arundel to a point in the municipality of the united townships of Preston and Hartwell, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 11, for a line of railway between the points above mentioned; not exceeding 30 miles.

18. For a line of railway from Roberval westward towards James bay, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 9; not exceeding 100 miles.

19. To the Quebec and Lake St. John Railway Company, for the following lines of railway:—

(*a*) from Valcartier station to St. Catherine, not exceeding 3·8 miles;
(*b*) from Valcartier station towards Gosford, not exceeding 5½ miles;
(*c*) from the end of the 35th mile of the branch to La Tuque, on the River St. Maurice, to La Tuque Falls, not exceeding 5 miles;
(*d*) from La Tuque Falls to the mouth of the River Croche, not exceeding 5 miles;
(*e*) from a point on the La Tuque branch to the steamboat landing near La Tuque, not exceeding 1·6 miles;
(*f*) from Herbertville to St. Joseph d'Alma; not exceeding 10 miles;
(*g*) from Chicoutimi south or southeast; not exceeeding 5 miles;

the said subsidies being granted in lieu of the subsidies granted by chapter 63 of 1908, section 1, items 43, 44 and 72, respectively; not exceeding 35·9 miles.

20. To the Quebec and New Brunswick Railway Company, for a line of railway from Chaudière Junction to a point at or near the International Boundary, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 25; not exceeding 62 miles.

21. To the Eastern Townships Railway Company, for a line of railway from the Intercolonial railway at St. Leonard's Junction to Dudswell, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 41; not exceeding 36 miles.

22. To the L'Avenir and Melbourne Railway Company, for a line of railway from Melbourne to Drummondville, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 71; not exceeding 28 miles.

23. To the Lotbinière and Megantic Railway Company, for a line of railway to extend its railway southerly from a point at or near Lyster, in Megantic county, to or towards a point at or near Lime Ridge, in the township of Dudswell, not exceeding 50 miles; and for a line of railway from a point on its line in the township of Inverness, to a point at or near the bridge over the St. Lawrence river at or near Quebec; not exceeding 30 miles; in lieu of the subsidies granted by chapter 63 of 1908, section 1, item 19; not exceeding in all 80 miles.

24. For a line of railway from Joliette to or near Lake Manuan, in lieu of the subsidy granted by chapter 57 of 1903, section 2, item 9; not exceeding 60 miles.

25. For a line of railway from St. Joachim towards Seven Islands, including branches to Murray Bay and Baie St. Paul, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 11; not exceeding 170 miles.

26. For a line of railway from a point at or near Ste. Agathe des Monts station towards the township of Howard, in the county of Argenteuil, passing near Lake St. Joseph and St. Mary, in a southerly direction, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 26; not exceeding 15 miles.

27. To the Ha Ha Bay Railway Company, for a line of railway from a point at or near Jonquières village to Baie des Ha Ha via Laterrière village, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 24; not exceeding 24 miles.

28. To the St. Mary's and Western Ontario Railway Company, for a line of railway from Embro to Exeter, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 60; not exceeding 36 miles.

29. To the Manitoulin and North Shore Railway Company for the following lines of railway:—

(*a*) from a point on the said company's line of railway between Little Current and Sudbury, westerly towards the Algoma Central and Hudson Bay railway; not exceeding 76 miles;

(*b*) from Little Current thence crossing the Canadian Pacific railway, at or near Stanley, and thence to Sudbury; not exceeding 88 miles;

(*c*) from a point at or near Sudbury, northerly, not exceeding 30 miles;

the said subsidies being granted in lieu of the subsidies granted by chapter 63 of 1908, section 1, item 51; not exceeding in all 194 miles.

30. To the Algoma Central and Hudson Bay Railway Company for the following lines of railway:—

(*a*) from Sault Ste. Marie to a point on the Canadian Pacific railway between White river and Dalton stations in the district of Algoma, not exceeding 200 miles;

(*b*) from Michipicoten Harbour, Lake Superior, towards the main line of the Canadian Pacific railway, not exceeding 25 miles;

(*c*) from a point on the Canadian Pacific railway, northerly, towards the National Transcontinental railway, not exceeding 50 miles;

the said subsidies being granted in lieu of the subsidies granted by chapter 43 of 1906, section 1, item 2, and chapter 63 of 1908, section 1, item 61; not exceeding in all 275 miles.

31. To the Bracebridge and Trading Lake Railway Company, for a line of railway from Bracebridge, in Muskoka, to a point at or near Baysville, Ontario, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 8; not exceeding 16 miles.

32. To the Lac Seul, Rat Portage and Keewatin Railway Company, for a line of railway from a point at or near Kenora to the National Transcontinental railway, in lieu of subsidy granted by chapter 63 of 1908, section 1, item 63 for 18 miles; not exceeding 22 miles.

33. To the Canadian Northern Quebec Railway Company, for a line of railway from Montreal to Hawkesbury, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 48; not exceeding 65 miles.

34. To the Nipigon Railway Company for the following lines of railway:—

(*a*) from a point at or near Nipigon station on the line of the Canadian Pacific railway to Nipigon lake; not exceeding 30 miles;

(*b*) from a point on Nipigon bay of Lake Superior to a point on the west of Lake Helen on the line of the Nipigon railway; not exceeding 3½ miles;

(*c*) from a point on the line of the Nipigon railway at or near the crossing of the French river to a point on Lake Jesse, by way of Cameron's Falls; not exceeding 1½ miles;

(*d*) from a point on the north shore of Lake Nipigon, northerly; not exceeding 45 miles;

the said subsidies being granted in lieu of the subsidies granted by chapter 63 of 1908, section 1, item 4; not exceeding in all 80 miles.

35. To the Ontario, Northern and Timagami Railway Company, for a line of railway from a point at or near Sturgeon Falls, in a northwesterly direction, to a point on the westerly shore of Lake Timagami, in the district of Nipissing, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 6; not exceeding 50 miles.

36. For a line of railway from Sharbot Lake or Bathurst station, in the province of Ontario, or between these points, via Lanark village, to Carleton Place, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 3; not exceeding 41 miles.

37. To the Erie, London and Tillsonburg Railway Company, for a line of railway from Port Burwell to London, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 29; not exceeding 35 miles.

38. To the Toronto, Lindsay and Pembroke Railway Company, for a line of railway from Golden lake to Bancroft, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 41; not exceeding 51 miles.

39. To the Kingston, Smith's Falls and Ottawa Railway Company, for a line of railway from Kingston to Ottawa, in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 19; not exceeding 101 miles.

40. To the Pacific Northern and Omineca Railway Company, for a line of railway from Edmonton, northwesterly, to or towards the Peace river, in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 51; not exceeding 110 miles.

41. To the Southern Central Pacific Railway Company, for the following lines of railway:

(*a*) from a point two miles west of Pincher station on the Crow's Nest Pass branch of the Canadian Pacific railway, northeasterly; not exceeding 10 miles;

(*b*) from a point two miles west of Pincher station on the Crow's Nest Pass branch of the Canadian Pacific railway, southwesterly; not exceeding 40 miles;

the said subsidies being granted in lieu of the subsidy granted by chapter 63 of 1908, section 1, item 37; not exceeding in all 50 miles.

42. To the Kettle River Valley Railway Company, for the following lines of railway:—

(*a*) from Midway to a junction near Merritt with the Nicola, Kamloops and Similkameen railway; not exceeding 250 miles;

(*b*) from a point on the company's line of railway near Coldwater river to a point on the Fraser river; not exceeding 50 miles;

the said subsidies being granted in lieu of the subsidies granted by chapter 40 of 1907, section 1, item 18, and chapter 63 of 1908, section 1, items 58 and 59, respectively; not exceeding in all 300 miles.

43. To the Kootenay Central Railway Company, for a line of railway from Golden towards the International Boundary via Windermere and Fort Steele, thence crossing the Crow's Nest Pass railway, at or near Elko; in lieu of the subsidy granted by chapter 43 of 1906, section 1, item 31; not exceeding 186 miles.

44. To the Esquimalt and Nanaimo Railway Company, for a line of railway from a point on its main line of railway, at or near Duncan's to Cowichan lake, in lieu of the subsidy granted by chapter 68 of 1908, section 1, item 67; not exceeding 24 miles.

45. For a line of railway from Montreal to a point on the National Transcontinental railway, in lieu of subsidy granted by chapter 63 of 1908, section 1, item 49; not exceeding 200 miles.

46. To the Little Nation River Railway Company, for a line of railway from Papineauville, on the Canadian Pacific railway, towards Lake Nomining, in lieu of subsidy granted by chapter 63 of 1908, section 1, item 70; not exceeding 30 miles.

2. In this Act, unless the context otherwise requires, the expression 'cost' means the actual, necessary and reasonable cost, and shall include the amount expended upon any bridge up to and not exceeding $25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of equipping the railway nor the cost of terminals, nor the cost of right-of-way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the chief engineer of the Department of Railways and Canals, certifying that he has made, or caused to be made, an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of construction of such railway.

3. The subsidies hereby authorized towards the construction of any railway shall be payable out of the Consolidated Revenue Fund of Canada, and may, unless otherwise expressly provided in this Act, at the option of the Governor in Council, on the report of the Minister of Railways and Canals, be paid as follows:—

(*a*) Upon completion of the work subsidized; or,

(*b*) By instalments, on the completion of each ten-mile section of the railway, in the proportion which the cost of such completed section bears to that of the whole work undertaken; or

(*c*) Upon the progress estimates on the certificate of the chief engineer of the Department of Railways and Canals that in his opinion, having regard to the whole work undertaken and the aid granted, the progress made justifies the payment of a sum not less than thirty thousand dollars; or,

(*d*) With respect to (*b*) and (*c*), part one way, part the other.

4. The subsidies hereinbefore authorized to be granted to companies named shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as establish to the satisfaction of the Governor in Council their ability to construct and complete the said railways respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August, 1910, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by the Governor in Council, and shall also be constructed according to descriptions, conditions and specifications, approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in each case in a contract between the company and the said Minister, which contract the Minister, with the approval of the Governor in Council,

is hereby empowered to make. The location also of such subsidized lines shall be subject to the approval of the Governor in Council.

5. The granting of such subsidies and the receipt thereof by the respective companies shall be subject to the condition that the Board of Railway Commissioners for Canada may at all times provide and secure to other companies such running powers, traffic arrangements and other rights as will afford to all railways connecting with the railway so subsidized reasonable and proper facilities in exercising such running power, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways; and the said Board shall have absolute control, at all times, over the rates and tolls to be levied and taken by any of the companies, or upon any of the railways hereby subsidized: Provided always that any decision of the said Board made under this section may be at any time varied, changed or rescinded by the Governor in Council, as he deems just and proper.

6. Every company receiving a subsidy under this Act, its successors and assigns, and any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the Government of Canada transportation of men, supplies, materials and mails over the portion of the lines in respect of which it has received such subsidy, and, whenever required, shall furnish mail cars properly equipped for such mail service; and such transportation and service shall be performed at such rates as are agreed upon between the Minister of the department of the government for which such service is being performed and the company performing it, and, in case of disagreement, then at such rates as are approved by the Board of Railway Commissioners for Canada; and in or towards payment for such charges the Government of Canada shall be credited by the company with a sum equal to three per cent per annum on the amount of the subsidy received by the company under this Act.

7. As respects all railways for which subsidies are granted by this Act, the company at any time owning or operating any of the railways shall, when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed by him, all books, accounts and vouchers showing the cost of constructing the railway, the cost of operating it, and the earnings thereof.

8. The Governor in Council may make it a condition of the grant of the subsidies herein provided that the company shall lay the railway with new steel rails and fastenings made in Canada and shall purchase all materials and supplies required for the construction of the railway, and the rolling stock for the first equipment of the railway, from Canadian producers, if such rails, fastenings, materials, supplies and equipment are procurable in Canada of suitable quality and upon terms as favourable as elsewhere, of which the Minister of Railways and Canals shall be the judge.

9. Whenever a contract has been duly entered into with a company for the construction of any line of railway hereby subsidized, the Minister of Railways and Canals, at the request of the company, and upon the report of the chief engineer of the Department of Railways and Canals, and his certificate that he has made careful examination of the surveys, plans and profile of the whole line so contracted for, and has duly considered the physical characteristics of the country to be traversed and the means of transport available for construction, naming the reasonable and probable cost of such construction, may, with the authorization of the Governor in Council, enter into a supplementary agreement, fixing definitely the maximum amount of the subsidy to be paid, based upon the said certificate of the chief engineer, and providing that the company shall be entitled to be paid, as the minimum, the ordinary subsidy of $3,200 per mile, together with sixty per cent of the difference between the amount so fixed and the said $3,200 per mile, if any; and the balance, forty per cent.

shall be paid only on completion of the whole work subsidized, and in so far as the actual cost, as finally determined by the Governor in Council upon the recommendation of the Minister of Railways and Canals, and upon the report and certificate of the said chief engineer, entitles the company thereto: Provided always—

(*a*) that the estimated cost, as certified, is not less on the average than $18,000 per mile for the whole mileage subsidized;

(*b*) that no payment shall be made except upon a certificate of the chief engineer that the work done is up to the standard specified in the company's contract;

(*c*) that in no case shall the subsidy exceed the sum of $6,400 per mile.

1911

No subsidies were authorized.



Intercolonial Railway.—" Ocean Limited."



Intercolonial Railway. Sydney, C.B.



Intercolonial Railway ; car ferry ; plying between Mulgrave and Point Tupper, Cap Breton.—Mulgrave, N.S.



Intercolonial Railway :—Halifax from Citadel.



Intercolonial Railway Reversing Falls, St. John. Tide coming in.



Intercolonial Raliway.—The Matapedia Valley.



Prince Edward Island Railway.—Charlottetown, P.E.I.



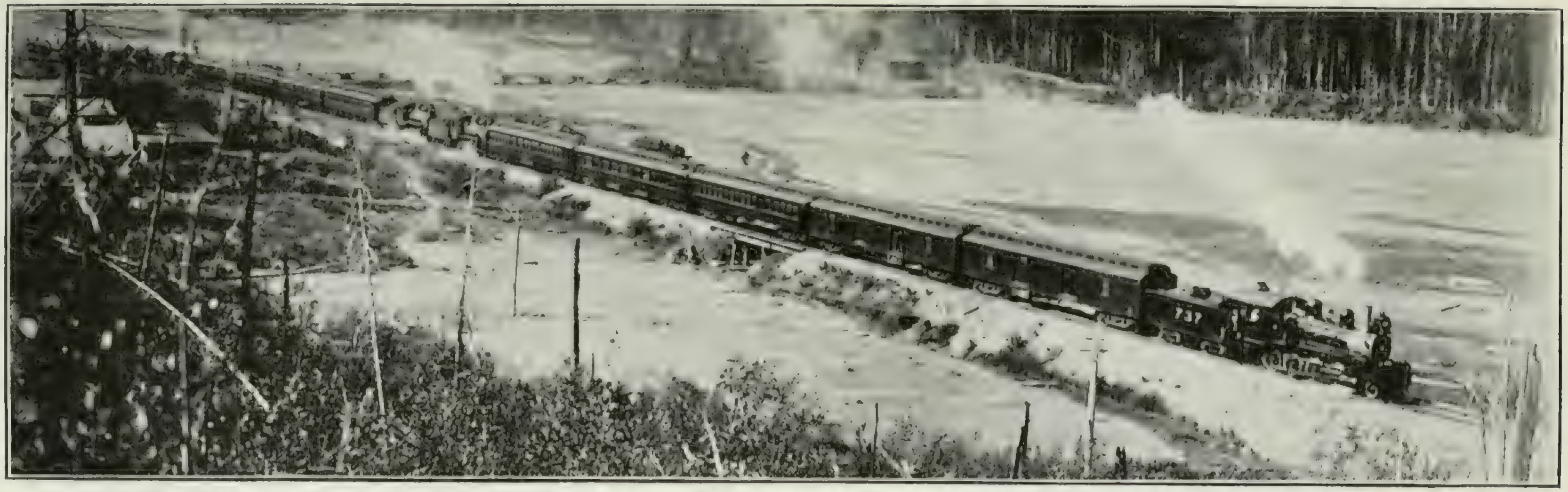
The " Flare " of a Gas Well at Moncton, N.B.



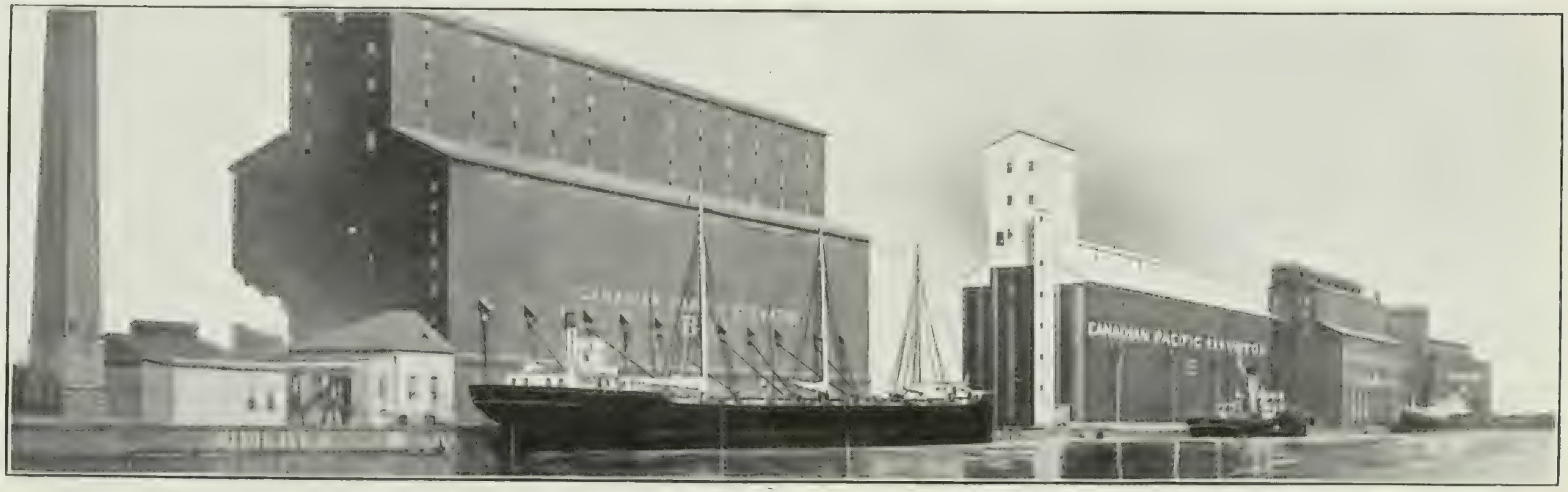
" Sir Donald " Selkirk Range, B.C. As seen from C.P.R. Co., hotel at Glacier.



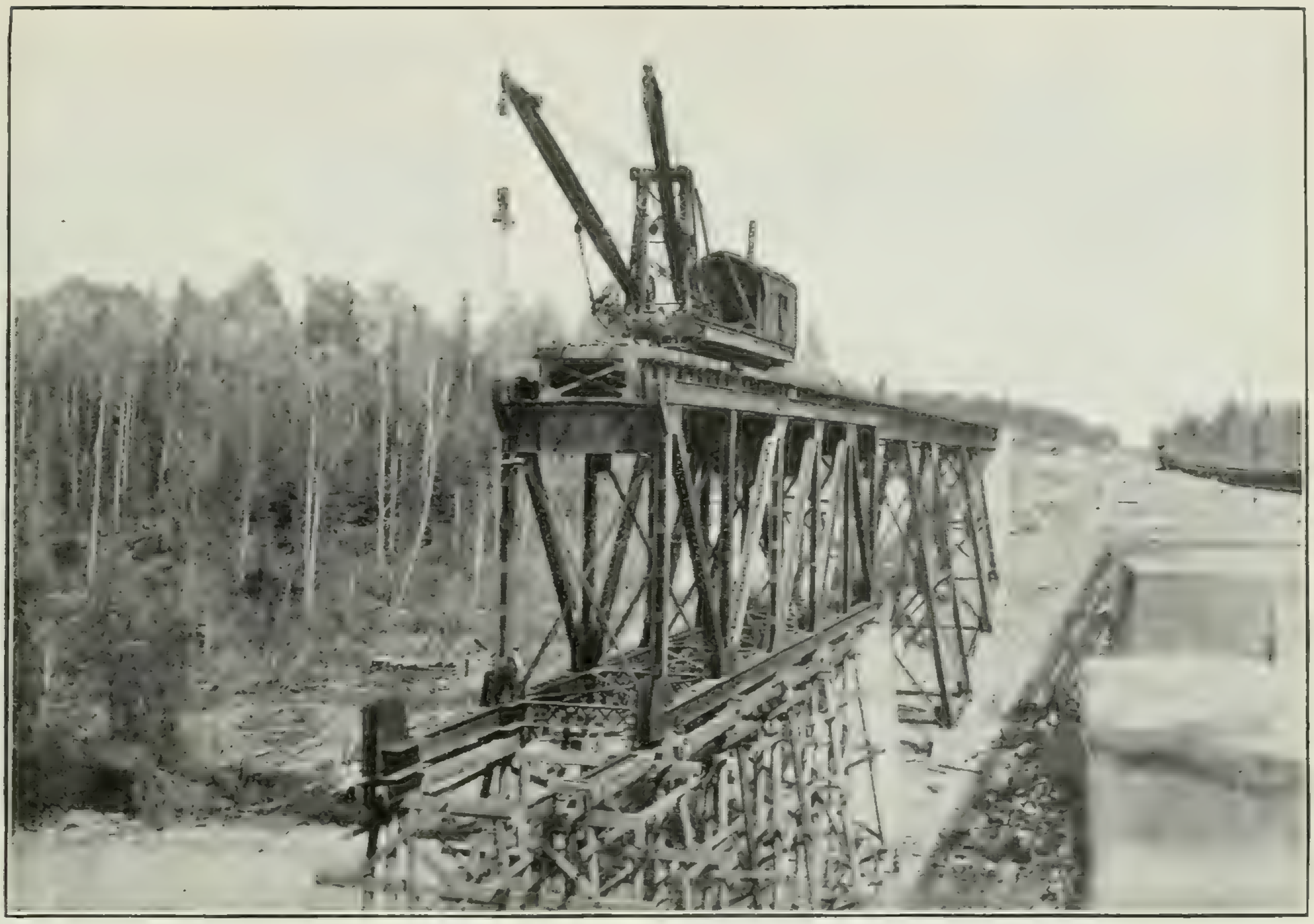
Canadian Pacific Railway.—General view of spiral tunnels near Field, B.C., Canadian Rockies. " The improved way ".



Canadian Pacific Railway : Oldmethod of ascending Kicking Horse Pyss ; grade 5½ per cent near Field, B.C., Canadian Rockies. This heavy grade has been successfully removed by the spiral tunnels.



Canadian Pacific Railway, Grain Elevators, Fort William, Lake Superior. Capacity : B. 1,250.000 bushels : E. 2.000.000 bushels ; A. 1.250.000 bushels ; C. 1.500.000 bushels.



Transcontinental Railway.—Bridge Construction.



Transcontinental Railway Shops. Transcona (East of Winnipeg)—Locomotive shop.



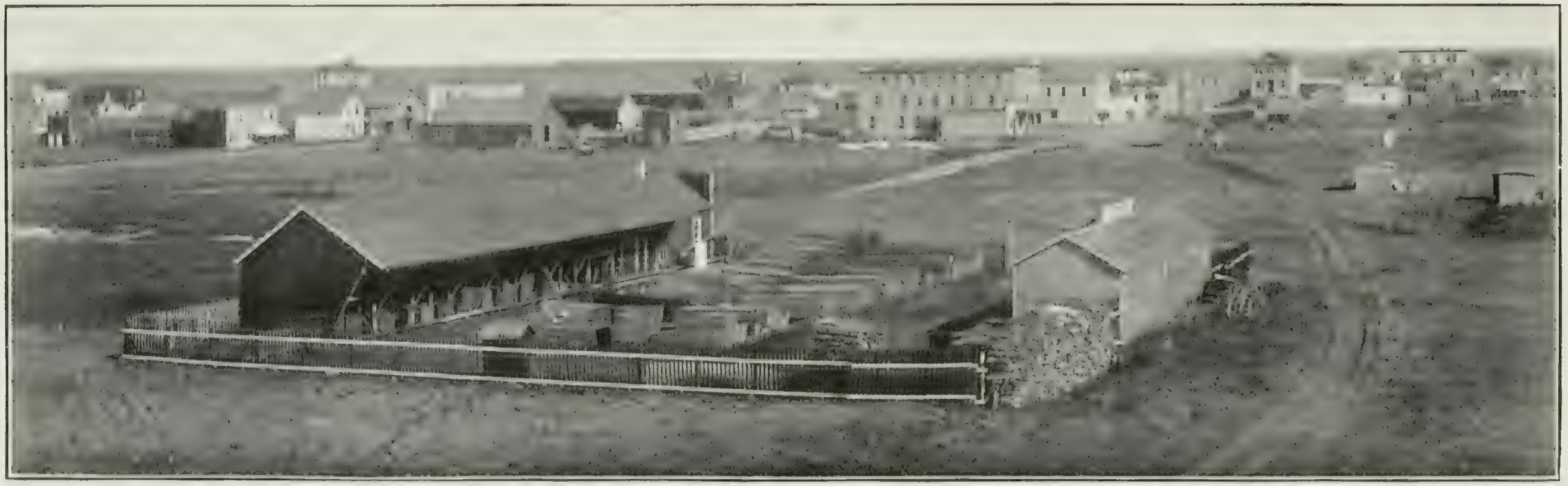
Wainwright, Alta. Grand Trunk Pacific Railway.



Grand Trunk Pacific Railway. Battle River Bridge, near Wainwright, Alta.



Saskatoon, Sask. Grand Trunk Pacific Railway.



Nokomis, Sask. Grand Trunk Pacific Railway.



Watrous, Sask., 1909. Grand Trunk Pacific Railway.



Melville, Sask., 1909. Grand Trunk Pacific Railway.



Punnichy, Sask. Grand Trunk Pacific Railway.



Building the Grand Trunk Pacific Railway, West of Edmonton, Alta. Showing track laying machine at work.



Grand Trunk Pacific Railway.—Turning First Sod at Fort William, Ont



First Cut at Prince Rupert, B.C. Grand Trunk Pacific Railway.



Grand Trunk Pacific Railway. Prince Rupert, B.C., 1907.



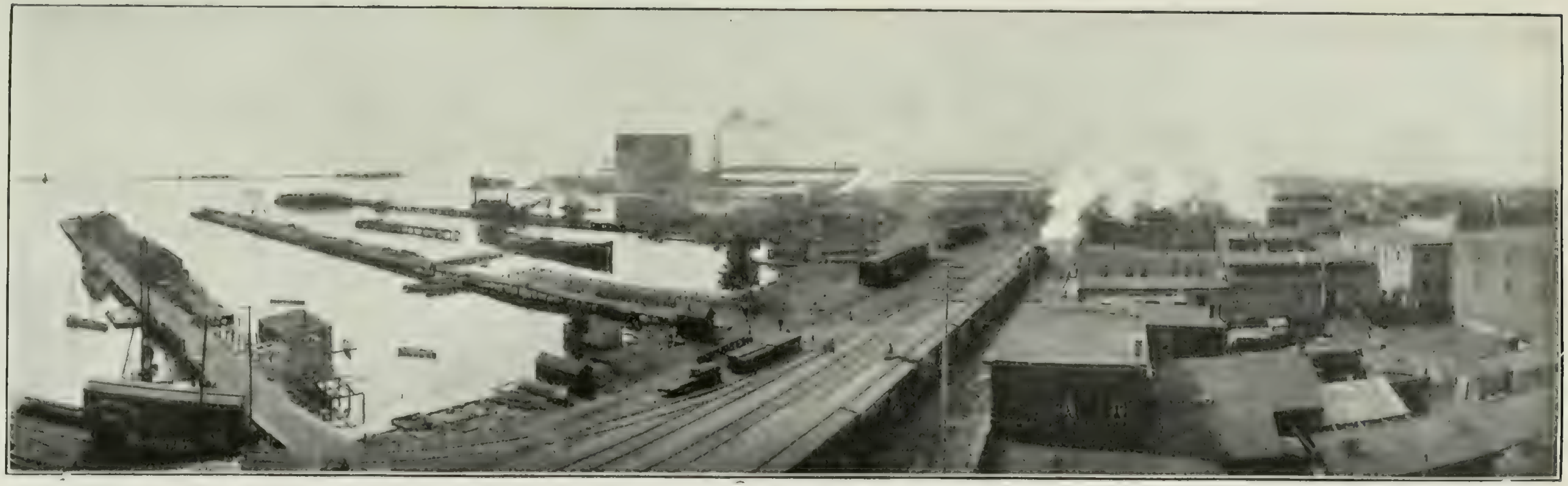
Grenville Street, Vancouver, B.C., (1911).



Grand Trunk Pacific Standard Train, Rivers, Man.



Port Arthur, Lake Superior.



The water front, Port Arthur, Lake Superior.



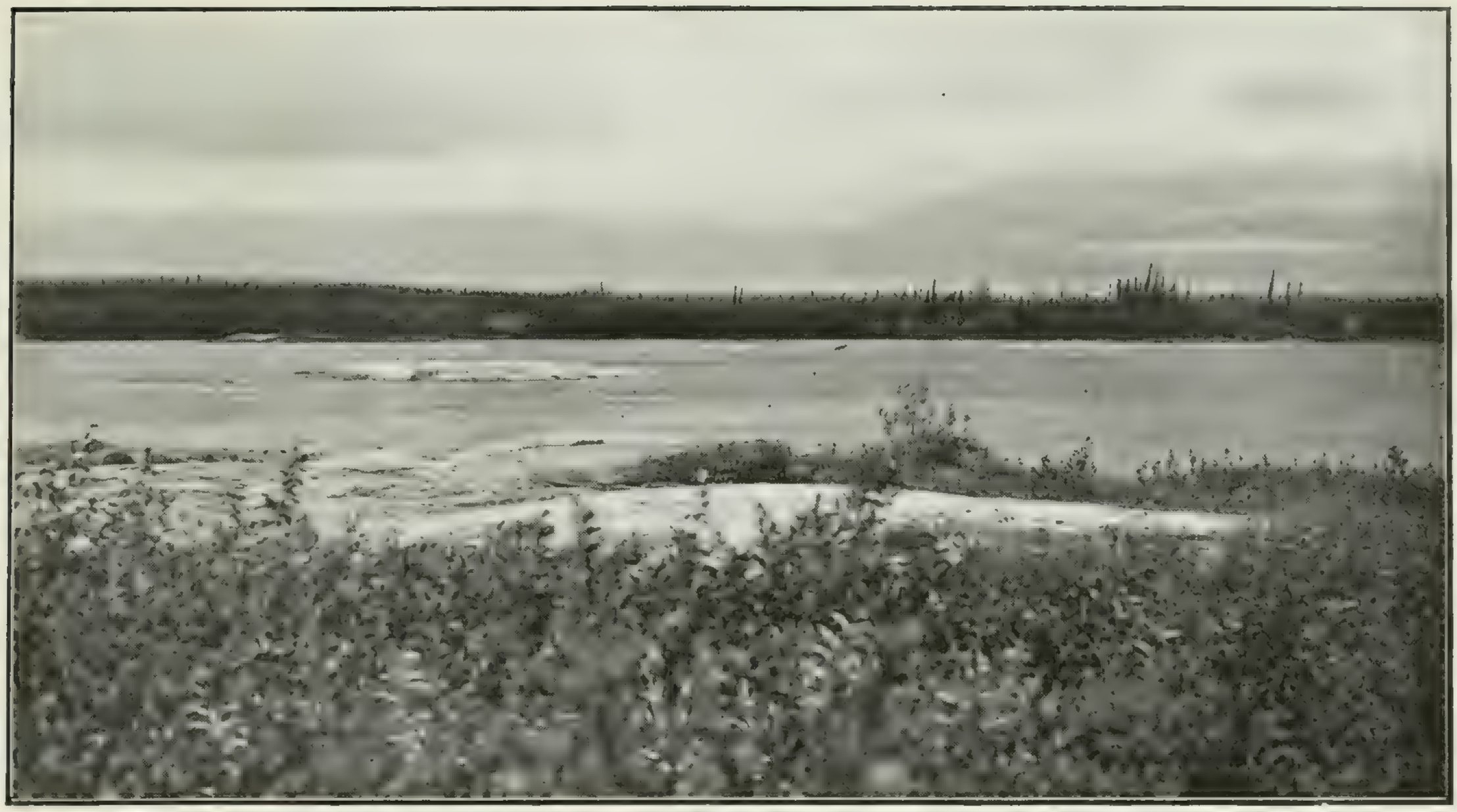
Dauphin, Man. The first terminus of the Canadian Northern Railway. In 1896 there were only two log huts at Dauphin. Approximative Population in 1911, 4,000.



Pithus Point, Rainy Lake, Canadian Northern Railway.



This was bare prairie two years previously when the C.N.R. first reached the site.



Hudsom Bay Railway.—Nelson river below Kettle Rapids.



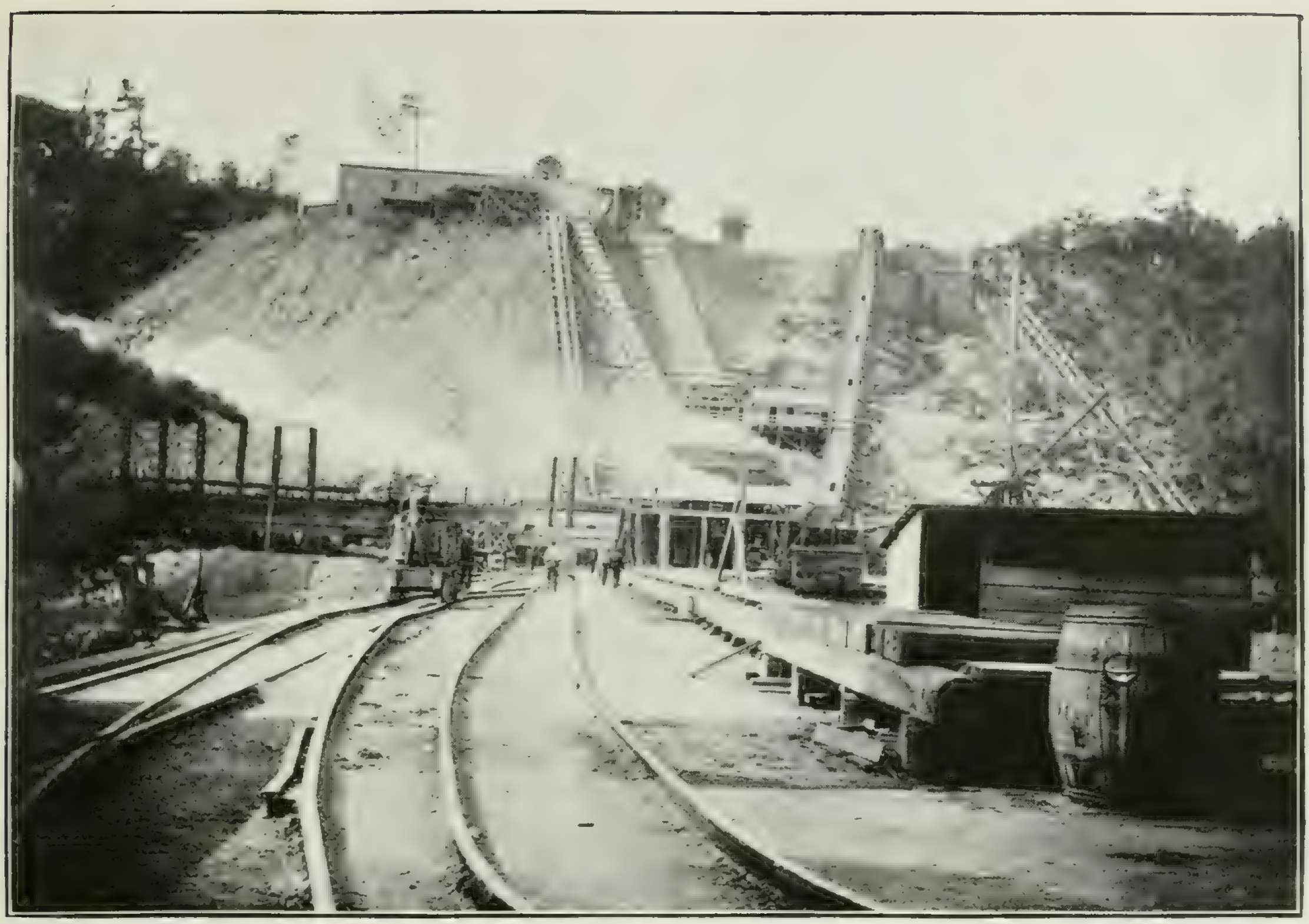
Hudson Bay Railway.—Poplar Narrows, Cormorant Lake.



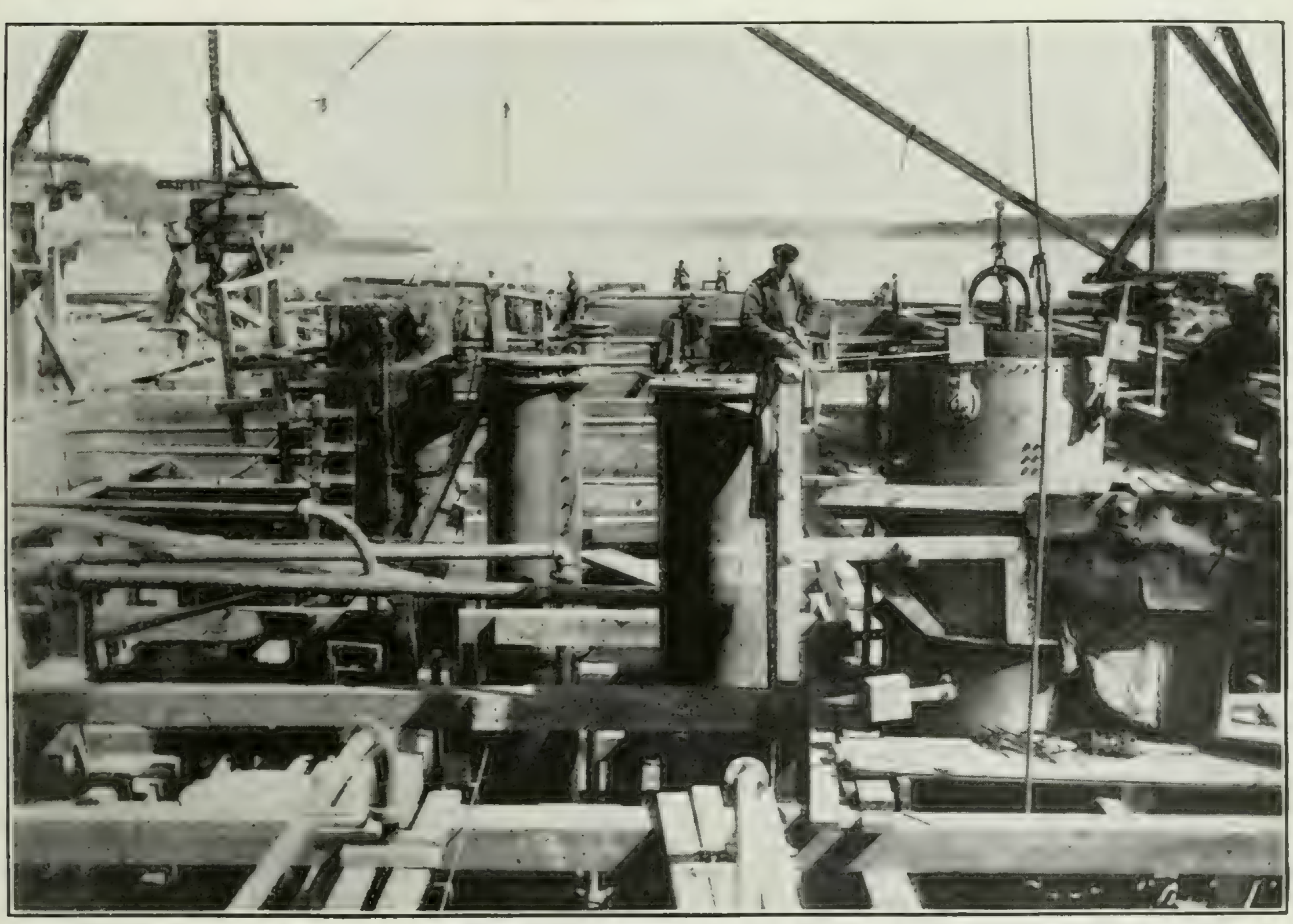
Quebec Bridge.—View of plant on south shore with view of north plant on far side of river.



Quebec Bridge.—View from the cliff showing plant in connection with sinking of north main pier caisson.



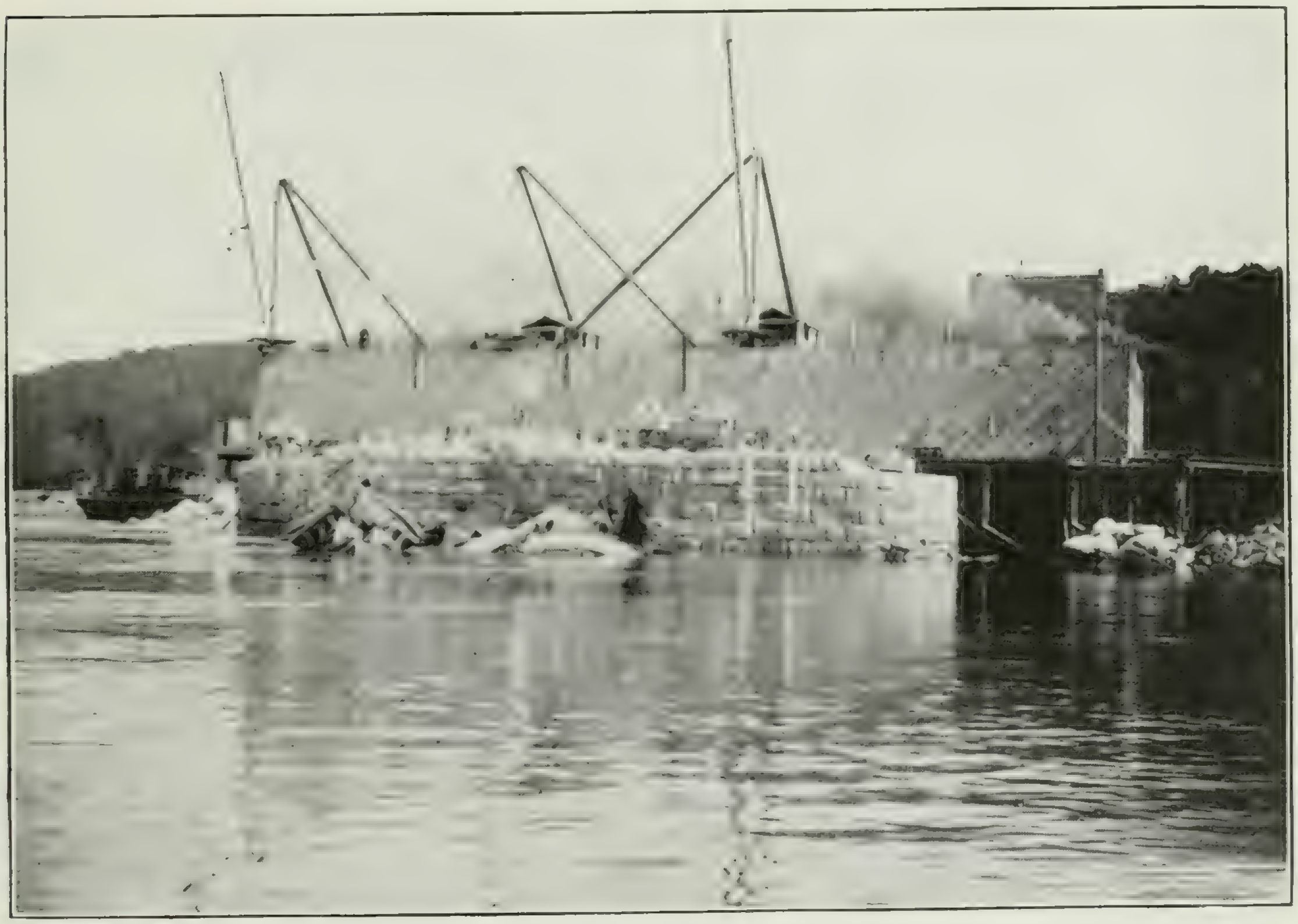
View of north shore showing Boiler, Compresser and Concrete Mining plants. Quebec Bridge in course of construction over River St. Lawrence.



Quebec Bridge.—The two caissons for the north main pier in course of sinking. The smaller shafts are ladder air shafts through which the men descend to the working chamber, down under the caisson. The larger shafts are material air shafts through which the excavated material is taken out. The steel bucket is just emerging from one of these shafts.



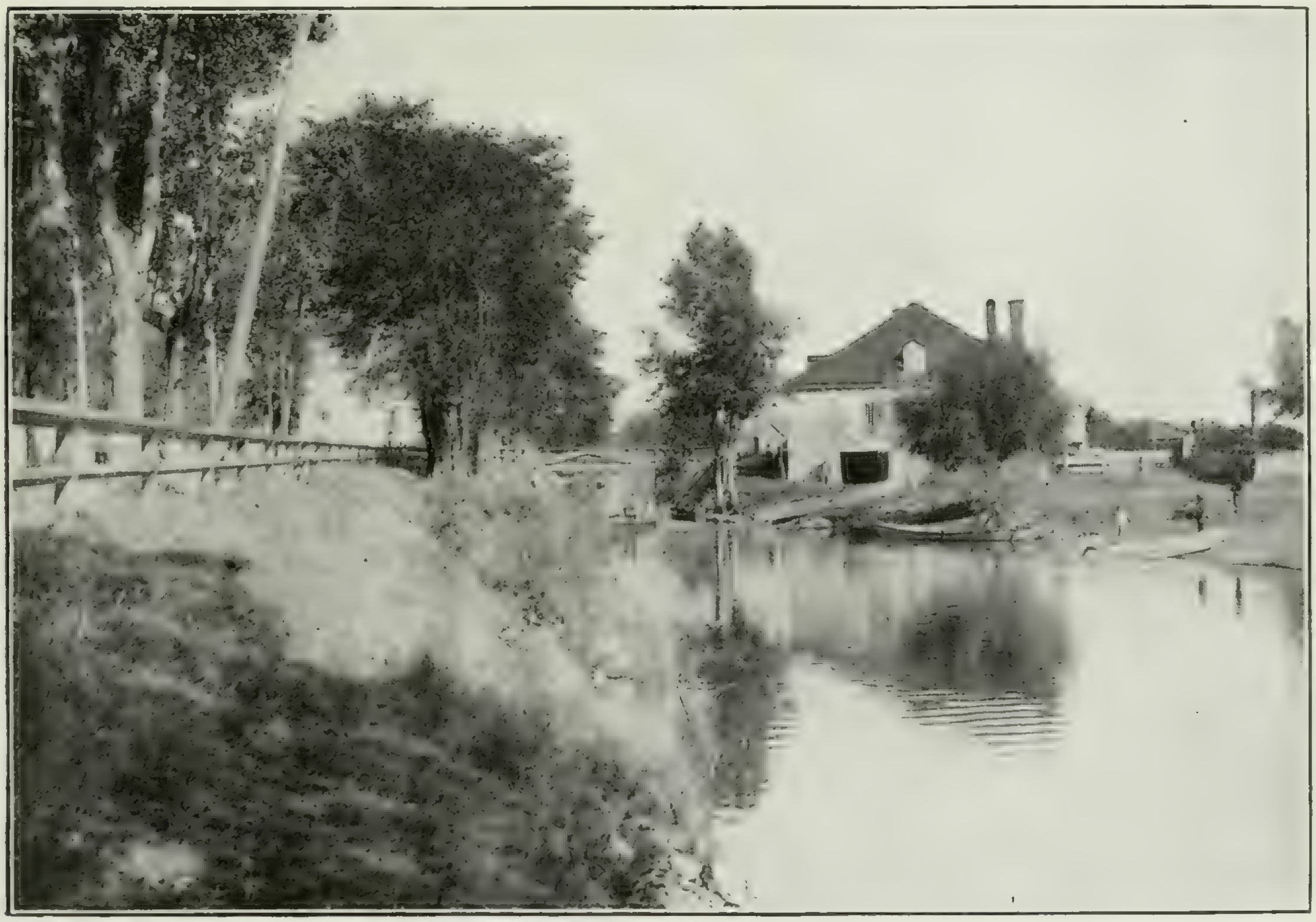
Quebec Bridge.—Launching the large caisson for south main pier. In this view it is just striking the water. The caisson is 180'-0 long and 55'-0 wide.



Quebec Bridge.—Caisson for south main pier, which was floated into position behind the old south main pier. The old pier is being demolished in the foreground.



Carillon Canal. Lower entrance to Lock No. 1, looking west.



Old Lachine Canal with Hudson's Bay Port on south bank, looking east.



Lachine Canal from Cote St. Paul Lock, looking east.



Lachine Canal North Lock looking east from Black's Bridge, Montreal.



St. Ours Lock, P.Q. Showing Old Mill Looking East.



St. Ours Lock, P.Q. Concrete pier below lock (looking west).



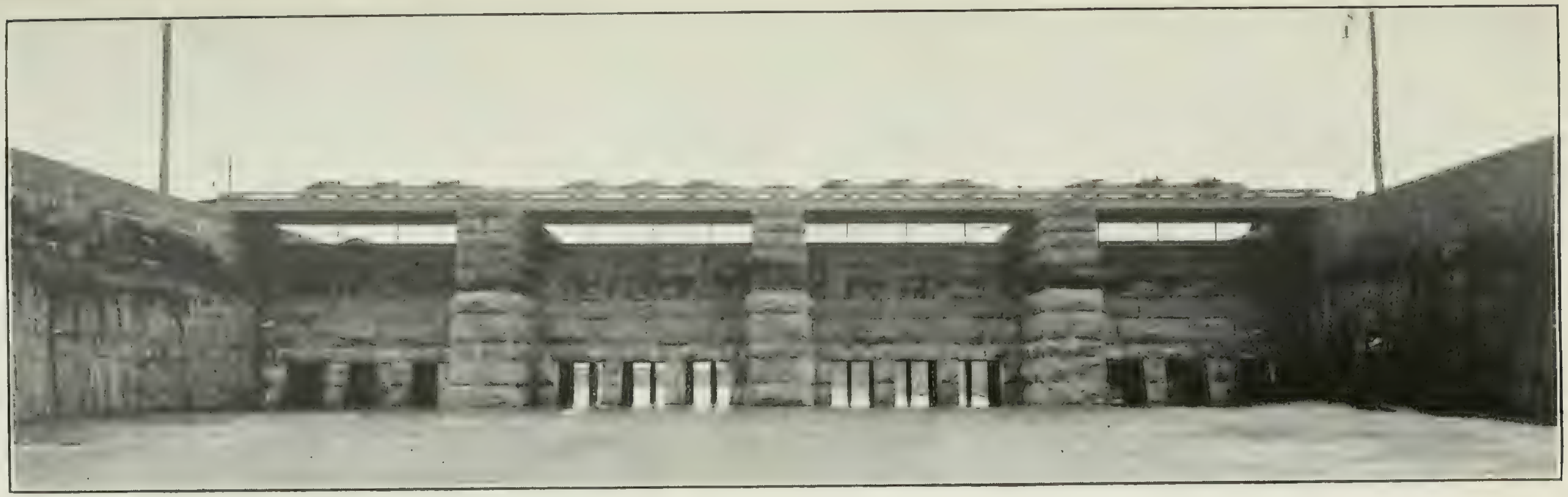
Soulanges Canal at Guard Gate Lock No. 4. View of Canal from top of large Stony Sluice.



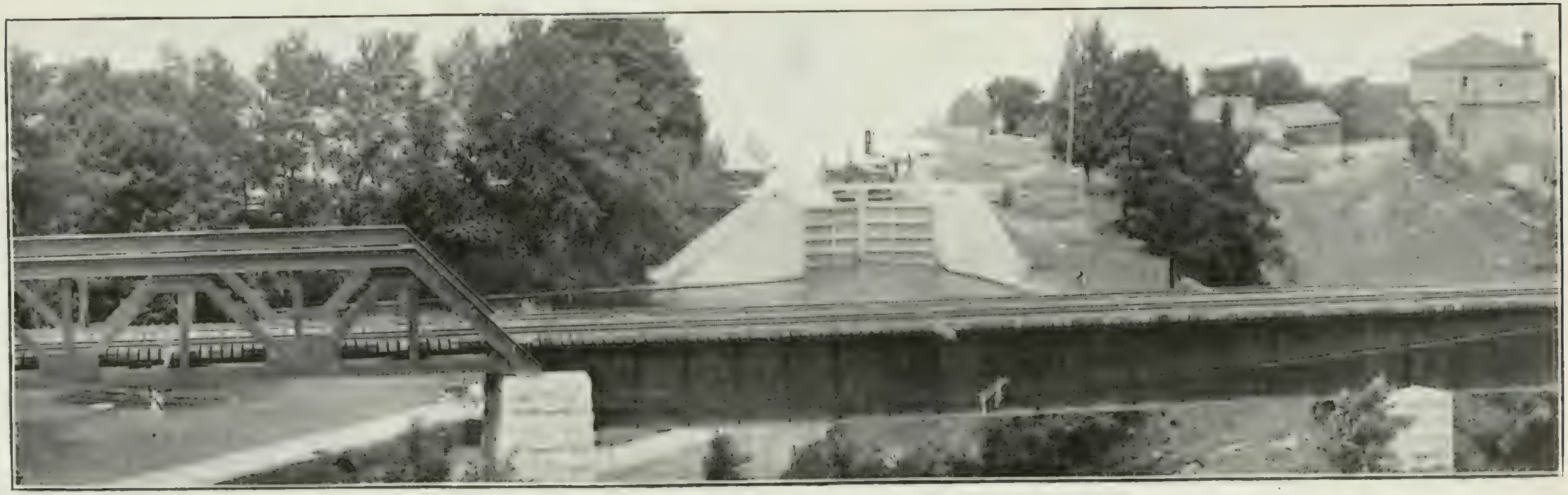
Soulanges Canal Sluice Gates Looking east.



Cornwall Canal. Swing Bridge, Cornwall : looking east.



Lock 19, Cornwall Canal. Supply Weir from lower Side.



Rideau Canal. Kingston Mills Lock Station, showing main line of Grand Trunk Railway crossing over locks.



Rideau Canal. The " Iron Duke " or " Wellington's Nose ", Cranberry Lake.



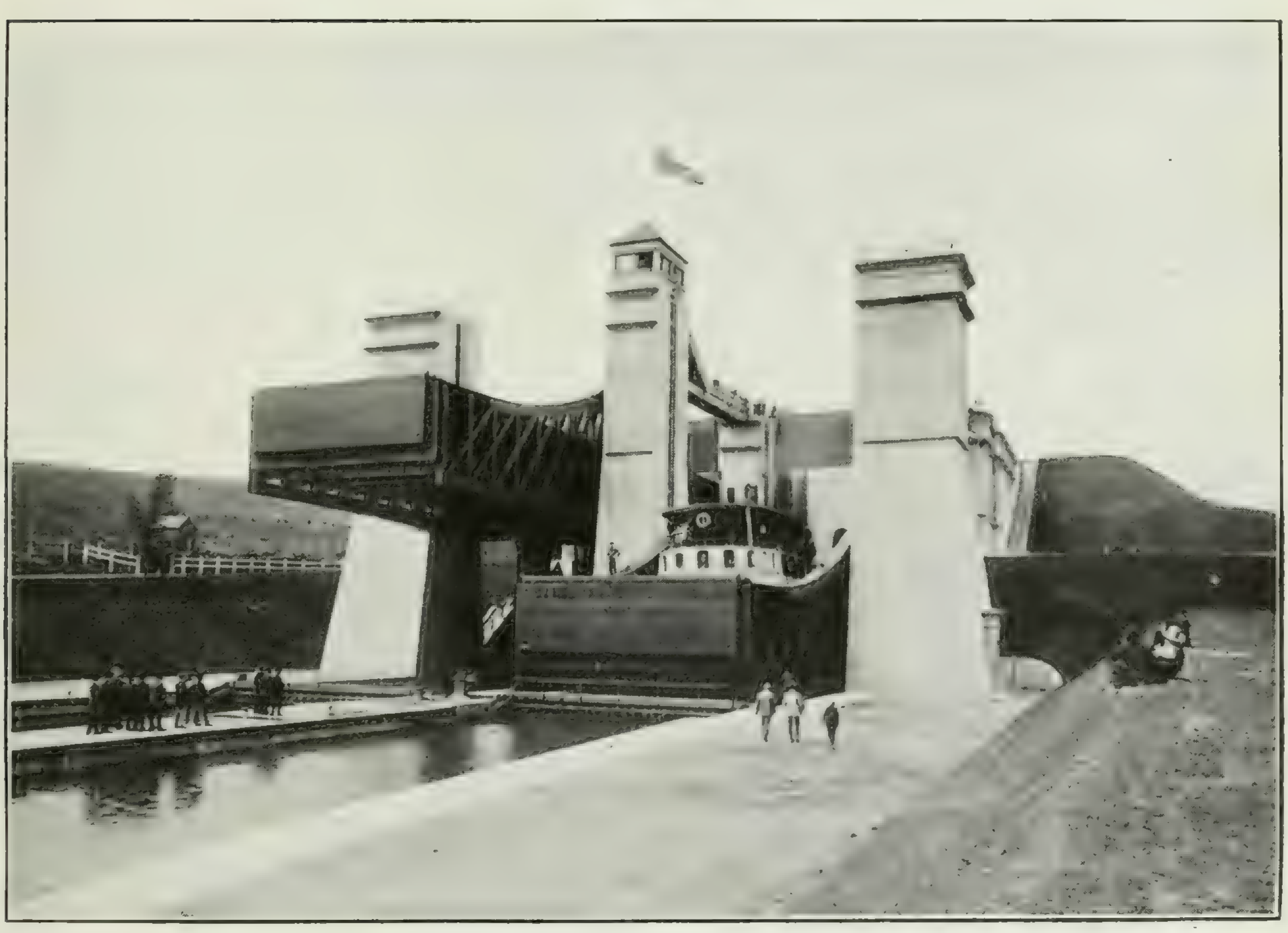
Rideau Canal. Old Block House, at Morton. Originally built to guard the dam at base of the cliff.



Rideau Canal. Foot of the By Wash at Jones' Falls Lock Station.



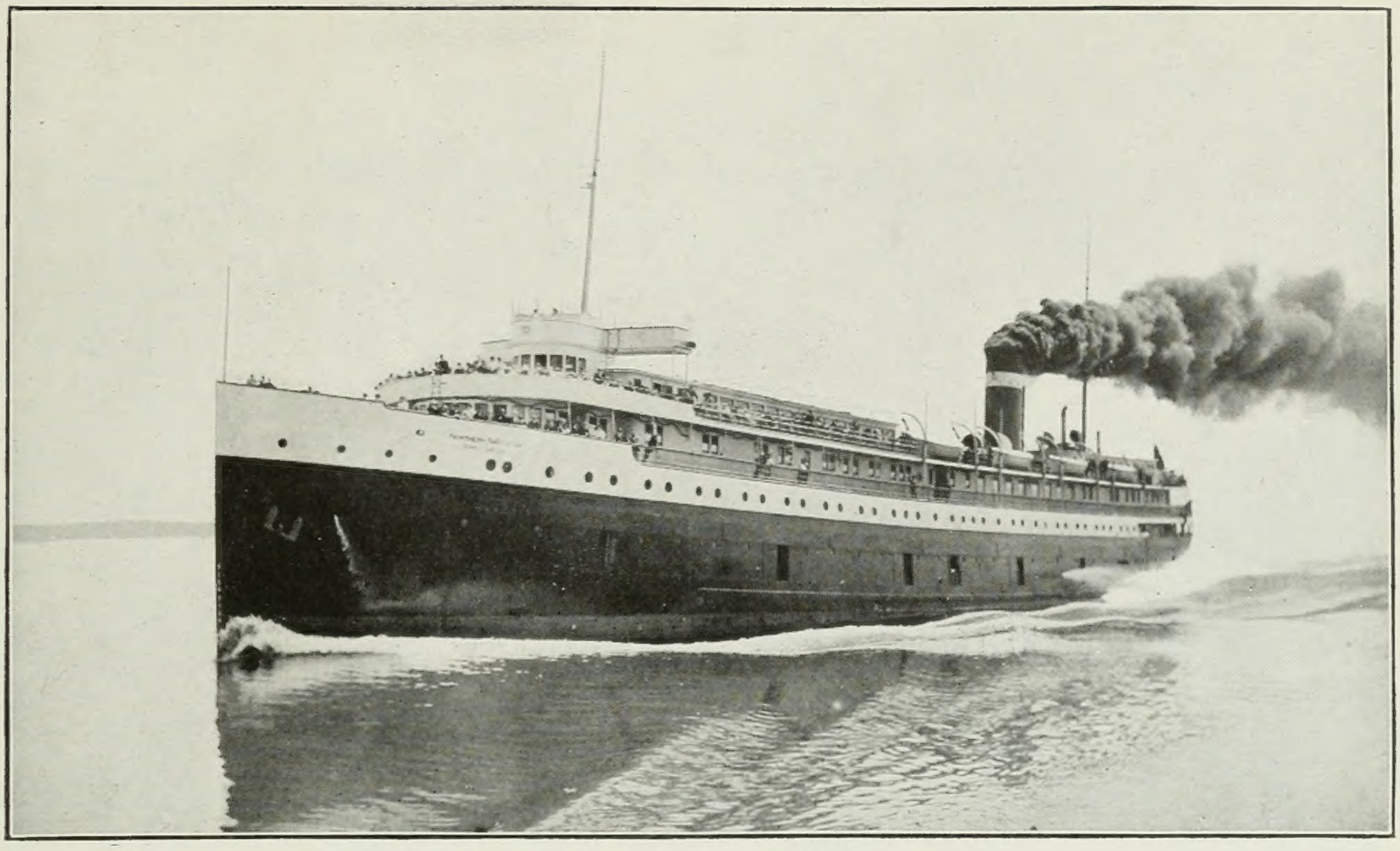
Rideau Canal. Cranberry Lake looking westwards from Jones' Falls Lock Station.



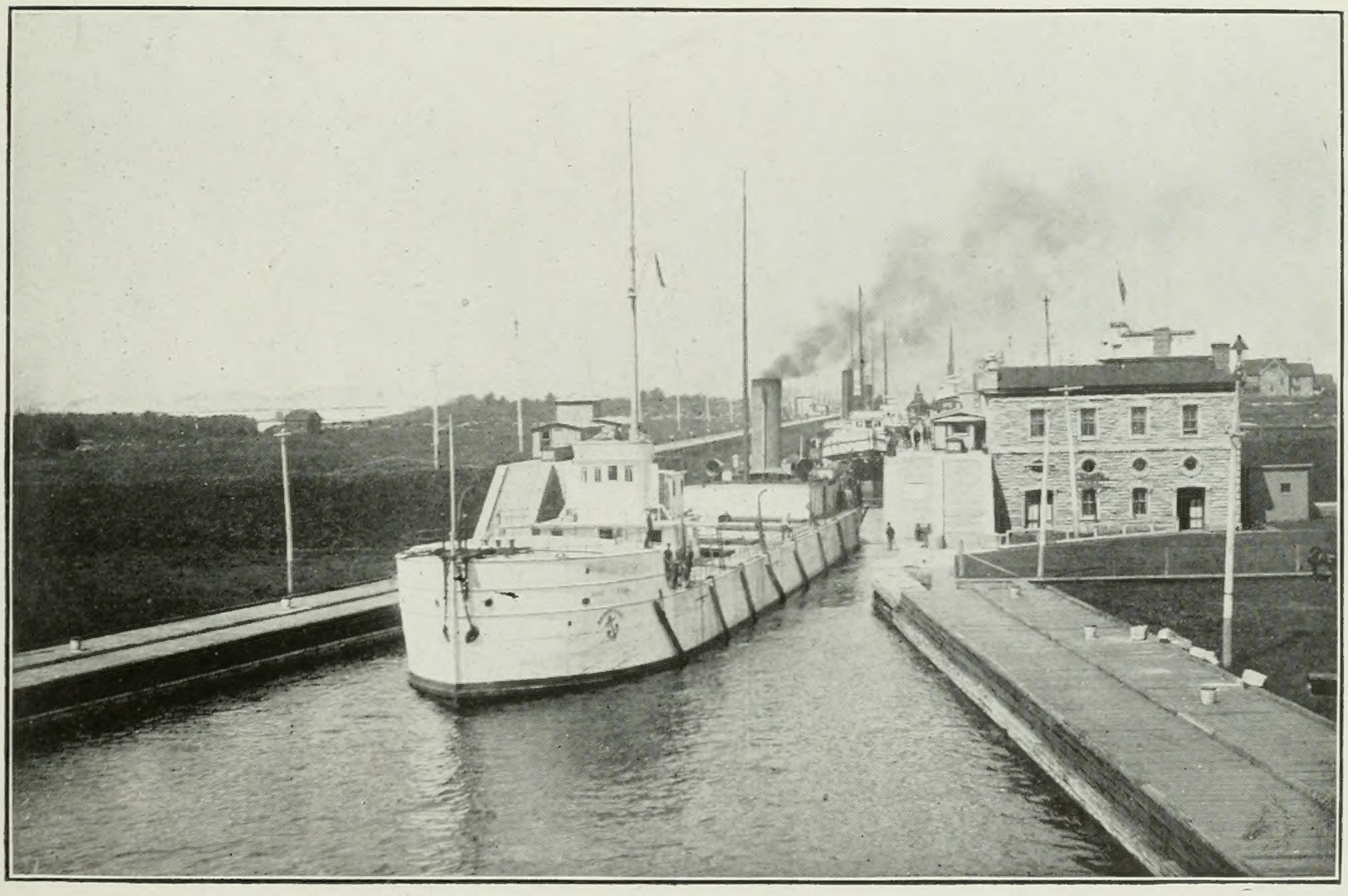
Hydraulic Lift Lock at Peterborough, Trent Canal.



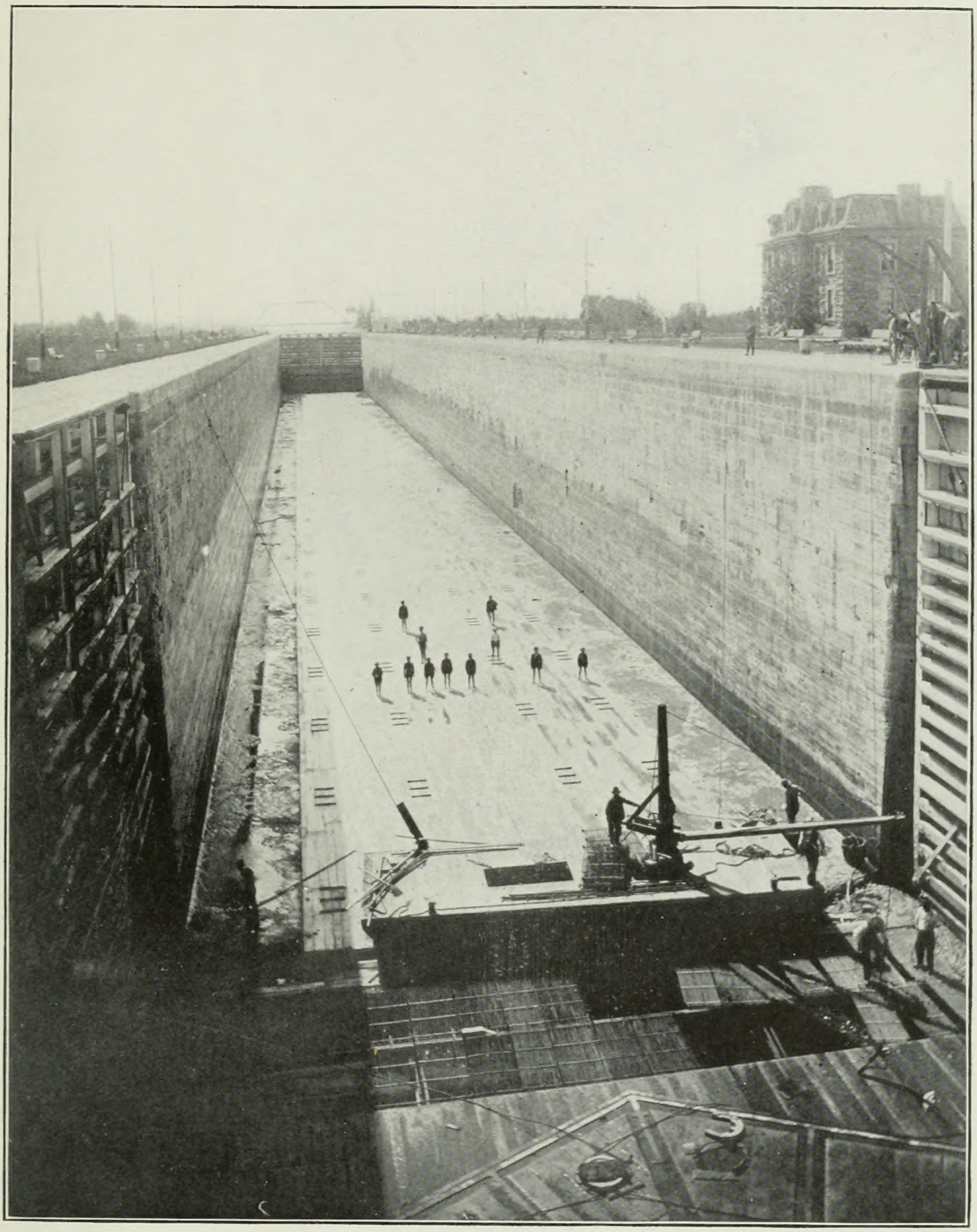
Welland Canal, Entrance at Port Colborne. Government grain elevator in distance.



Str. Hamonic of the Northern Navigation Co., on Lake Huron. The Hamonic is the largest Canadian passenger vessel on the Lake. Length 365 feet, beam 50 feet.



Sault Ste. Marie Canal.



Sault Ste. Marie Canal.—Lock unwatered for repairs, 1907.